

INTEROFFICE MEMORANDUM

Date: September 17, 2003

To: W. H. Landman

MS 3920

6-5279

From: S. N. Wasley 

MS 3655

6-3620

Subject: OU 7/10 STAGED INTERIM ACTION STAGE III PROJECT (RE-ESCALATED MAX TREATMENT WITH THERMAL DESORPTION [4a+3aP] ESTIMATE)

Per your request, Estimating Services has re-escalated the above referenced estimate in accordance with the R. Daniels September 16, 2003, schedule. Refer to transmittal RDA-23-03/SNW-12-03 (Estimate File# 5974-2) for estimate recapitulation forms.


The rounded Total Project Cost (TPC) for this option.....\$555,000,000

Please refer to the above referenced transmittal for recapitulation forms.

If you have any questions or comment, please contact me at 526-3620 or e-mail at SWASLEY.

S N W

Attachments

cc: D. E. Wilkins, MS 3920
Estimate File 5974-6 
S. N. Wasley File (SNW-15-03)

Uniform File Code: 8000

Disposition Authority: A16-1.5-b

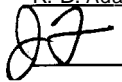

Retention Schedule: Cut off at the end of each fiscal year. Destroy 15 years after cutoff.

NOTE: Original disposition authority, retention schedule, and Uniform Filing Code applied by the sender may not be appropriate for all recipients. Make adjustments as needed.

TPC Summary Report

Project Name: **OU 7-10 Staged Interim Action**
Stage III Project-Treatment- Max Treat with TD (Re-escalated)
 Project Location: **INEEL-RWMC**
 Project Number: **5974-2 (4a+3aP)**

<u>ESTIMATE ELEMENT</u>	<u>Estimate Subtotal</u>	<u>Escalation</u>	<u>Continaency</u>	<u>TOTAL</u>
Total Estimated Cost (TEC)	\$273,487,613	\$42,709,701^{15.62%}	\$239,261,487^{75.67%}	\$555,458,801
<hr/>				
Total Project Cost (TPC)	\$273,487,613	\$42,709,701^{15.62%}	\$239,261,487^{75.67%}	\$555,458,801
Rounded TPC (Rounded to the nearest \$ 1000000)				\$555,000,000

	<i>Remarks</i>
Type of Estimate: <u>Project Support</u>	
Estimator: <u>R. D. Adams / S. N. Wasley</u>	
Checked By: 	
Approved By: 	



Project Summary Report

Project Name: **OU 7-10 Staged Interim Action**
Stage III Project-Treatment-Max Treat with TD (Re-escalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

<u>Level</u>	<u>Description</u>	<u>Estimate Subtotal</u>	<u>Escalation</u>	<u>Contingency</u>	<u>Contingency %</u>	<u>TOTAL</u>
1.0	ESH&Q	\$18,076,309	\$2,414,995	\$4,503,428	73.38%	\$35,527,732
1.01	--ENVIRONMENTAL	\$0,020,790	\$1,178,458	\$7,337,404	73.38%	\$17,336,651
1.02	--SAFETY ANALYSIS	\$1,430,398	\$191,101	\$1,189,849	73.38%	\$2,811,349
1.03	--SAFETY & HEALTH	\$2,566,303	\$342,858	\$2,134,730	73.38%	\$5,043,891
1.04	--FIRE PROTECTION	\$210,353	\$20,103	\$174,978	73.38%	\$413,434
1.05	--RADIOLOGICAL CONTROLS	\$771,293	\$103,045	\$641,505	73.38%	\$1,515,923
1.07	--EMERGENCY PLANNING	\$20,047	\$3,747	\$23,330	73.38%	\$55,124
1.08	--SAFEGUARDS & SECURITY	\$42,071	\$5,621	\$34,996	73.38%	\$82,687
1.09	--QUALITY	\$4,207,054	\$562,062	\$3,499,557	73.30%	\$8,268,673
2.0	DESIGN ENGINEERING	\$56,647,027	\$6,260,945	\$61,416,274	97.63%	\$124,324,246
2.01	--CONCEPTUAL DESIGN/R&D	\$17,609,405	\$945,625	\$18,115,046	97.63%	\$36,670,077
2.02	--PRELIMINARY DESIGN	\$0,414,100	\$602,304	\$0,000,793	97.63%	\$17,977,285
2.03	--FINAL DESIGN	\$14,023,514	\$1,500,516	\$15,155,918	97.63%	\$30,679,947
2.04	--TRANSURANIC REPORTING SYSTEM (TRIPS)	\$16,600,000	\$3,132,420	\$19,264,517	97.63%	\$38,996,937
3.0	PROCUREMENT	\$96,381,432	\$12,876,559	\$66,925,953	61.25%	\$176,183,944
3.1	--PROCUREMENT MANAGEMENT	\$2,271,009	\$303,514	\$1,577,513	61.25%	\$4,152,036
3.2	--PROCUREMENT- EQUIPMENT	\$00,742,207	\$10,707,159	\$56,066,200	61.25%	\$147,595,653
3.2.01	---EQUIPMENT PROCUREMENT (WRPF)	\$61,320,957	\$8,192,480	\$42,580,436	61.25%	\$112,093,873
3.2.01.01	----WRPF EQUIPMENT	\$59,891,017	\$8,001,440	\$41,587,506	61.25%	\$109,479,962
3.2.01.02	-----WRPF-HVAC EQUIPMENT	\$1,259,386	\$168,254	\$874,500	61.25%	\$2,302,140
3.2.01.03	-----WRPF I&C PROCUREMENT	\$170,554	\$22,786	\$118,430	61.25%	\$311,770
3.2.05	---EQUIPMENT PROCUREMENT (CHEM LEACH)	\$19,394,220	\$2,591,068	\$13,467,082	61.25%	\$35,452,370
3.2.05.01	----CHEM LEACH- LEACH/PRECIPITATE/CALCINE	\$4,358,954	\$582,356	\$3,026,798	61.25%	\$7,968,109
3.2.05.02	----CHEM LEACH- BUILDING PROCESS AREA HVAC	\$3,685,109	\$492,331	\$2,558,890	61.25%	\$6,736,329

INEEL

Project Summary Report

Project Name: **OU 7-10 Staged Interim Action**
Stage III Project-Treatment- Max Treat with TD (Re-escalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

<u>Level</u>	<u>Description</u>	<u>Estimate Subtotal</u>	<u>Escalation</u>	<u>Continaency</u>	<u>Continaency%</u>	<u>TOTAL</u>
3.2.05.03	---CHEM LEACH - INCINERATION EQUIPMENT	\$3,156,655	\$421,729	\$2,191,938	61.25%	\$5,770,322
3.2.05.04	----CHEM LEACH - INCINERATION OFF-GAS TREATMENT EQUIP. LOW NOX	\$2,716,436	\$362,916	\$1,886,256	61.25%	\$4,965,607
3.2.05.05	----CHEM LEACH - OFF-GAS TREATMENT, HIGH NOX	\$1,121,555	\$149,840	\$778,793	61.25%	\$2,050,188
3.2.05.06	----CHEM LEACH - THERMAL DESORPTION, SOIL <100 nCi	\$1,895,768	\$253,275	\$1,316,395	61.25%	\$3,465,437
3.2.05.07	---CHEM LEACH - THERMAL DESORTION. SOIL >100 nCi	\$785,774	\$104,979	\$545,631	61.25%	\$1,436,384
3.2.05.08	---CHEM LEACH - BUILDING/PROCESS UTILITIES	\$821,359	\$109,734	\$570,341	61.25%	\$1,501,433
3.2.05.09	----CHEM LEACH - I&C PROCUREMENT	\$852,611	\$113,909	\$592,041	61.25%	\$1,558,561
3.2.06	---EQUIPMENT PROCUREMENT (AIRLOCK TO CHARACTERIZATION)	\$27,030	\$3,611	\$10,769	61.25%	\$49,410
3.3	--BBWI MATERIAL HANDLING FEE	\$13,367,416	\$1,785,887	\$9,282,152	61.25%	\$24,435,455
4.0	CONSTRUCTION	\$68,784,984	\$12,979,726	\$58,738,712	71.84%	\$140,503,422
4.1	--CONSTRUCTION MANAGEMENT	\$9,816,459	\$1,852,366	\$8,382,733	71.84%	\$20,051,559
4.2	--CONSTRUCTION SUBCONTRACTS	\$58,968,524	\$11,127,361	\$50,355,978	71.84%	\$120,451,863
4.2.01	---(WRP) WASTE RECEIVING & PREP BLDG.	\$37,033,047	\$7,139,096	\$32,307,406	71.84%	\$77,279,549
4.2.01.01	---WRPF - GENERAL CONDITIONS	\$8,278,786	\$1,562,207	\$7,069,643	71.84%	\$16,910,636
4.2.01.02	----WRPF - SITEWORK	\$3,359,633	\$633,963	\$2,868,948	71.84%	\$6,862,543
4.2.01.02.01	-----UTILITY & SUPPORT	\$3,146,171	\$593,682	\$2,686,662	71.84%	\$6,426,516
4.2.01.02.01.01	-----UTILTIY & SUPPORT - FIRE PUMP HOUSE	\$172,476	\$32,546	\$147,285	71.84%	\$352,308
4.2.01.02.01.02	-----UTILTIY & SUPPORT - POTABLE WATER SYSTEM	\$86,731	\$16,366	\$74,063	71.84%	\$177,160
4.2.01.02.01.03	-----UTILTIY & SUPPORT - SANITARY WASTE SYSTEM	\$201,511	\$38,025	\$172,080	71.84%	\$411,616
4.2.01.02.01.04	-----UTILTIY & SUPPORT - FIRE PIPING SYSTEM	\$1,212,046	\$228,713	\$1,035,023	71.84%	\$2,475,782
4.2.01.02.01.05	-----ELECTRICAL SUPPLY	\$1,473,407	\$278,032	\$1,258,21	71.84%	\$3,009,650
4.2.01.02.01.05.2	-----SITEWORK	\$3,856	\$728	\$3,293	71.84%	\$7,876
4.2.01.02.01.05.3	-----CONCRETE	\$26,721	\$5,042	\$22,818	71.84%	\$54,582
4.2.01.02.01.05.4	-----ELECTRICAL	\$1,442,830	\$272,262	\$1,232,100	71.84%	\$2,947,192
4.2.01.02.01.05.5	-----SWITCHGEAR	\$615,613	\$116,166	\$525,700	71.84%	\$1,257,479

INEEL

Project Summary Report

Project Name: **OU 7-10 Staged Interim Action**
Stage III Project-Treatment-Max Treat with TD (Re-escalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

<u>Level</u>	<u>DescriDtion</u>	<u>Estimate Subtotal</u>	<u>Escalation</u>	<u>Continaency</u>	<u>Continaency%</u>	<u>TOTAL</u>
4.2.01.02.01.05.4.2	-----TRANSFORMERS	\$290,001	\$54,723	\$247,645	71.84%	\$592,370
4.2.01.02.01.05.4.3	-----STANDBY GENERATOR	\$379,571	\$71,625	\$324,133	71.84%	\$775,329
4.2.01.02.01.05.4.4	CONDUCTORSAND GROUNDING	\$147,015	\$27,742	\$125,543	71.84%	\$300,299
4.2.01.02.01.05.4.5	-----TESTING	\$10,631	\$2,006	\$9,078	71.84%	\$21,715
4.2.01.02.02	-----WRPF - EARTHWORK	\$213,462	\$40,280	\$182,285	71.84%	\$436,028
4.2.01.03	-----WRPF - CONCRETE	\$5,400,985	\$1,019,166	\$4,612,154	71.84%	\$11,032,305
4.2.01.05	-----WRPF - METALS	\$323,847	\$61,110	\$276,548	71.84%	\$661,504
4.2.01.07	-----WRPF - THERMAL & MOISTURE PROTECTION	\$1,079,325	\$203,669	\$921,686	71.84%	\$2,204,680
4.2.01.08	-----WRPF - DOORS& WINDOWS	\$21,475	\$4,052	\$18,338	71.84%	\$43,865
4.2.01.11	-----WRPF - EQUIPMENT-INSTALLGFE	\$7,665,120	\$1,446,408	\$6,545,604	71.84%	\$15,657,131
4.2.01.15	-----WRPF - MECHANICAL	\$7,957,580	\$1,501,595	\$6,795,349	71.84%	\$16,254,525
4.2.01.15.01	WRPF - INSTALL HVAC EQUIPMENT& DUCT	\$1,322,367	\$249,531	\$1,129,231	71.84%	\$2,701,128
4.2.01.15.02	WRPF - FIRE PROTECTION	\$3,872,176	\$730,680	\$3,306,632	71.84%	\$7,909,489
4.2.01.15.03	WRPF - PLANT AIR	\$127,500	\$24,059	\$108,878	71.84%	\$260,437
4.2.01.15.04	WRPF -BREATHING AIR	\$700,000	\$132,090	\$597,763	71.84%	\$1,429,853
	-----WRPF -PROCESS PIPING	\$1,935,537	\$365,236	\$1,652,845	71.84%	\$3,953,618
4.2.01.16	-----WRPF - ELECTRICAL	\$3,746,295	\$706,926	\$3,199,136	71.84%	\$7,652,358
4.2.01.16.01	WRPF -GENERAL FACILITIES ELECTRICAL	\$2,347,500	\$442,973	\$2,004,640	71.84%	\$4,795,113
4.2.01.16.02	WRPF - ELECTRICALSWITCH GEAR& PANEL BOARDS	\$1,156,441	\$218,220	\$987,539	71.84%	\$2,362,201
4.2.01.16.02.1	-----SWITCHGEAR	\$523,418	\$98,769	\$446,971	71.84%	\$1,069,157
4.2.01.16.02.2	-----EQUIPMENT CONTROLS	\$74,082	\$13,979	\$63,262	71.84%	\$151,324
4.2.01.16.02.3	RACEWAYSAND ENCLOSURES	\$112,674	\$21,262	\$96,218	71.84%	\$230,154
4.2.01.16.02.4	CONDUCTORSAND GROUNDING	\$435,636	\$82,205	\$372,010	71.84%	\$889,850
4.2.01.16.02.5	-----TESTING	\$10,631	\$2,006	\$9,078	71.84%	\$21,715
4.2.01.16.03	WRPF - MONITORINGAND CONTROLS	\$80,450	\$15,181	\$68,700	71.84%	\$164,331
4.2.01.16.04	WRPF -CRITICALITY & RAD MONITORING SYSTEMS INSTALLATION	\$76,904	\$14,512	\$65,672	71.84%	\$157,088

INEEL

Project Summary Report

Project Name: **OU 7-70 Staged Interim Action**
Stage III Project-Treatment-Max Treat with TD (Re-escalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

<u>Level</u>	<u>Description</u>	<u>Estimate Subtotal</u>	<u>Escalation</u>	<u>Contingency</u>	<u>Continaencv %</u>	<u>TOTAL</u>
4.2.01.16.05	-----WRPF - CCTV MONITORING SYSTEM	\$85,000	\$16,040	\$72,585	71.84%	\$173,625
4.2.05	----CHEM LEACH BLDG.	\$17,895,505	\$3,376,002	\$15,281,808	71.04%	\$36,554,195
4.2.05.01	---GENERAL CONDITIONS	\$2,473,991	\$466,842	\$2,112,656	71.84%	\$5,053,489
4.2.05.02	-----SITEWORK	\$255,066	\$48,131	\$217,812	71.84%	\$521,009
4.2.05.02.01	-----CHEM LEACH SITEWORK	\$217,417	\$41,027	\$185,662	71.84%	\$444,106
4.2.05.02.02	CHEM STORAGE & PREPARATIONSITEWORK	\$37,649	\$7,104	\$32,150	71.84%	\$76,903
4.2.05.03	---CONCRETE	\$944,874	\$178,298	\$806,872	71.84%	\$1,930,043
4.2.05.03.01	-----CHEM LEACH - CONCRETE	\$817,818	\$154,322	\$698,373	71.84%	\$1,670,513
4.2.05.03.02	CHEM STORAGE & PREP. - CONCRETE	\$127,056	\$23,975	\$108,499	71.84%	\$259,530
4.2.05.05	---METALS	\$1,524,607	\$287,693	\$1,301,933	71.84%	\$3,114,233
4.2.05.05.01	CHEM LEACH - METALS	\$1,337,362	\$252,360	\$1,142,035	71.84%	\$2,731,757
4.2.05.05.02	-----CHEM STOR. & PREP. - METALS	\$107,245	\$35,333	\$159,898	71.84%	\$382,476
4.2.05.07	---THERMAL & MOISTURE PROTECTION	\$2,981,034	\$562,521	\$2,545,645	71.84%	\$6,089,200
4.2.05.07.01	-----CHEM LEACH -THERMAL & MOISTURE PROTECTION	\$2,738,808	\$516,813	\$2,338,796	71.84%	\$5,594,416
4.2.05.07.02	-----CHEM STOR. & PREP. -THERMAL & MOISTURE PROTECTION	\$242,227	\$45,708	\$206,849	71.84%	\$494,784
4.2.05.08	---DOORS & WINDOWS	\$159,563	\$30,110	\$136,259	71.84%	\$325,932
4.2.05.08.01	-----CHEM LEACH - DOORS& WINDOWS	\$146,094	\$27,568	\$124,757	71.84%	\$298,419
4.2.05.08.02	-----CHEM STOR. & PREP. - DOORS& WINDOWS	\$13,469	\$2,542	\$11,502	71.84%	\$27,513
4.2.05.09	---FINISHES	\$402,001	\$75,858	\$343,288	71.84%	\$821,147
4.2.05.09.01	-----CHEM LEACH - FINISHES	\$368,099	\$69,460	\$314,337	71.84%	\$751,896
4.2.05.09.02	-----CHEM STOR. & PREP. -FINISHES	\$33,902	\$6,397	\$28,951	71.84%	\$69,251
4.2.05.1	-----CHEM-LEACH EQUIPMENT-INSTALLGFE	\$1,854,426	\$349,930	\$1,583,581	71.84%	\$3,787,937
4.2.05.15	-----MECHANICAL	\$5,484,420	\$1,034,910	\$4,683,402	71.84%	\$11,202,732
4.2.05.15.01	-----INSTALLHVAC EQUIPMENT & DUCTWORK	\$2,053,621	\$387,518	\$1,753,683	71.84%	\$4,194,822
4.2.05.15.01.01	-----CHEM LEACH HVAC	\$2,022,548	\$381,655	\$1,727,148	71.84%	\$4,131,351
4.2.05.15.01.02	-----CHEM STOR. & PREP. HVAC	\$31,073	\$5,863	\$26,535	71.84%	\$63,471

INEEL

Project Summary Report

Project Name: **OU 7-10 Staged Interim Action**
Stage III Project-Treatment- Max Treat with TD (Re-escalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

<u>Level</u>	<u>DescriDtion</u>	<u>Estimate Subtotal</u>	<u>Escalation</u>	<u>Continaency</u>	<u>Continaency %</u>	<u>TOTAL</u>
4.2.05.15.02	—FIRE PROTECTION	\$893,922	\$168,683	\$763,362	71.84%	\$1,825,966
4.2.05.15.02.01	-----CHEM LEACH FIRE PROTECTION	\$789,784	\$149,032	\$674,433	71.84%	\$1,613,250
4.2.05.15.02.02	-----CHEM STOR. a PREP. FIRE PROTECTION	\$104,138	\$19,651	\$88,928	71.84%	\$212,717
4.2.05.15.03	CHEM LEACH - PLANT AIR	\$61,781	\$11,658	\$52,758	71.84%	\$126,198
4.2.05.15.04	-----CHEM LEACH - BREATHINGAIR	\$339,192	\$64,006	\$289,652	71.84%	\$692,849
4.2.05.15.05	-----PROCESS PIPING	\$2,135,904	\$403,045	\$1,823,948	71.84%	\$4,362,897
4.2.05.15.05.1	-----CHEM LEACH PROCESS PIPING	\$1,875,768	\$353,957	\$1,601,806	71.84%	\$3,831,530
4.2.05.15.05.2	CHEM STOR. a PREP PROCESS PIPING	\$260,136	\$49,088	\$222,142	71.84%	\$531,366
4.2.05.16	- —ELECTRICAL	\$1,815,523	\$342,589	\$1,550,360	71.84%	\$3,708,473
4.2.05.16.01	GENERAL FACILITIES ELECTRICAL	\$1,295,257	\$244,415	\$1,106,080	71.84%	\$2,645,752
4.2.05.16.01.01	CHEM LEACH GENERAL FACILITIES ELECTRICAL	\$1,137,505	\$214,647	\$971,368	71.84%	\$2,323,520
4.2.05.16.01.02	-----CHEM STOR. a PREP. GENERAL FACILITIES ELECTRICAL	\$157,752	\$29,768	\$134,712	71.84%	\$322,232
4.2.05.16.03	MONITORINGAND CONTROLS	\$402,175	\$75,890	\$343,436	71.84%	\$821,501
4.2.05.16.03.01	CHEMLEACH/CHEM STOR. MONITORINGAND CONTROLS	\$402,175	\$75,890	\$343,436	71.84%	\$821,501
4.2.05.16.04	CRITICALITY a RAD MONITORING SYSTEMS INSTALLATION	\$76,904	\$14,512	\$65,672	71.84%	\$157,088
4.2.05.16.04.01	-----CHEM LEACH CRITICALITY a RAD MONITORING SYSTEMS INSTALLATION	\$76,904	\$14,512	\$65,672	71.84%	\$157,088
4.2.05.16.05	-----CCTV MONITORING SYSTEM	\$41,188	\$7,772	\$35,172	71.84%	\$84,132
4.2.05.16.05.01	CHEM LEACH CCTV MONITORINGSYSTEM	\$41,188	\$7,772	\$35,172	71.84%	\$84,132
4.2.06	---AIRLOCK TO CHARACTERIZATION	\$2,692,052	\$507,990	\$2,298,869	71.84%	\$5,498,911
4.2.06.01	---AIR LOCK -GENERAL CONDITIONS	\$631,505	\$119,165	\$539,272	71.84%	\$1,289,941
4.2.06.02	---AIR LOCK - SITEWORK	\$21,914	\$4,135	\$18,714	71.84%	\$44,763
4.2.06.03	---AIR LOCK - CONCRETE	\$81,083	\$15,300	\$69,241	71.84%	\$165,625
4.2.06.05	---AIR LOCK - METALS	\$630,246	\$118,927	\$538,197	71.84%	\$1,287,370
4.2.06.09	---AIR LOCK - FINISHES	\$13,510	\$2,549	\$11,537	71.84%	\$27,596

INEEL

Project Summary Report

Project Name: **OU 7-10 Staged Interim Action**
Stage III Project-Treatment-Max Treat with TD (Re-escalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

<u>Level</u>	<u>Description</u>	<u>Estimate Subtotal</u>	<u>Escalation</u>	<u>Contingency</u>	<u>Continnency%</u>	<u>TOTAL</u>
4.2.06.13	—AIR LOCK - SPECIAL CONSTRUCTION	\$715,528	\$135,020	\$611,023	71.84%	\$1,461,571
4.2.06.15	—AIR LOCK - MECHANICAL	\$358,708	\$67,688	\$306,318	71.84%	\$732,714
4.2.06.15.01	—AIR LOCK - HVAC	\$256,703	\$48,440	\$219,210	71.84%	\$524,353
4.2.06.15.02	-----AIR LOCK - FIRE PROTECTION	\$45,736	\$8,630	\$39,056	71.84%	\$93,422
4.2.06.15.03	—AIR LOCK - PLANT AIR	\$8,670	\$1,636	\$7,404	71.84%	\$17,710
4.2.06.15.04	AIR LOCK - BREATHING AIR	\$47,600	\$8,982	\$40,648	71.84%	\$97,230
4.2.06.16	—AIR LOCK - ELECTRICAL	\$239,557	\$45,204	\$204,568	71.84%	\$489,329
4.2.06.16.01	—AIR LOCK - GENERAL FACILITIES ELECTRICAL	\$159,630	\$30,122	\$136,316	71.84%	\$326,068
4.2.06.16.03	—AIR LOCK - MONITORING AND CONTROLS	\$37,613	\$7,097	\$32,119	71.84%	\$76,829
4.2.06.16.04	AIR LOCK - CRITICALITY & RAD MONITORING SYSTEMS INSTALLATION	\$36,534	\$6,894	\$31,198	71.84%	\$74,626
4.2.06.16.05	AIR LOCK - CCTV MONITORING SYSTEM	\$5,780	\$1,091	\$4,936	71.84%	\$11,806
4.2.07	—OFFICE/RESTROOM AREAS	\$547,921	\$103,393	\$467,895	71.84%	\$1,119,209
6.0	TESTING & TURNOVER	\$20,976,699	\$5,795,862	\$26,135,873	97.62%	\$52,908,434
6.1	--TESTING AND TURNOVER PLANNING	\$392,658	\$108,492	\$489,232	97.62%	\$990,382
6.2	--S. O. TESTING	\$9,459,333	\$2,613,614	\$11,785,835	97.62%	\$23,858,781
6.2.01	—S.O. TESTING	\$5,889,876	\$1,627,373	\$7,338,478	97.62%	\$14,855,726
6.2.02	—TRIALBURN	\$3,569,457	\$986,241	\$4,447,357	97.62%	\$9,003,055
6.3	--ORR SUPPORT	\$434,729	\$120,116	\$541,650	97.62%	\$1,096,494
6.4	--FACILITY ACCEPTANCE REVIEW	\$294,494	\$81,369	\$366,924	97.62%	\$742,786
6.5	--RADIOLOGICAL CONTROL SUPPORT	\$215,962	\$59,670	\$269,078	97.62%	\$544,710
6.6	--OPERATOR TRAINING	\$3,926,584	\$1,084,915	\$4,892,319	97.62%	\$9,903,812
6.7	--OPERATING PROCEDURES	\$863,848	\$238,681	\$1,076,310	97.62%	\$2,178,840
6.8	--START-UP COORDINATION	\$255,228	\$70,519	\$318,001	97.62%	\$643,748
6.9	—SPARES	\$5,133,863	\$1,418,486	\$6,396,525	97.62%	\$12,948,874
7.0	PROJECT MANAGEMENT	\$12,621,162	\$2,381,613	\$11,008,247	73.37%	\$26,011,022

INEEL

Project Summary Report

Project Name: **OU 7-70 Staged Interlm Action**
Stage III Project-Treatment- Max Treat w/ th TD (Re-escalated)
Project Location: **INEEL-RWMC**
Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
Prepared By: **R. D. Adams / S. N. Wasley**
Estimate Type: **Project Support**

<u>Level</u>	<u>Description</u>	<u>Estimate Subtotal</u>	<u>Escalation</u>	<u>Continaency</u>	<u>Continaency %</u>	<u>TOTAL</u>
Total	MAX TREATMENT WITH TDF-Re-escalated	\$273,487,613	\$42,709,701	\$239,261,487	75.67%	\$555,458,801

DETAIL ITEM REPORT

Project Name: **OU 7-10 Staged Interim Action**
Stage III Project-Treatment-Max Treatwith TD (Reescalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

Code	Description	Contractor	Qty	UOW	Hrs	Resource	Labor	Equipment	Material	Subcontractor	Other	TOTAL
1.01 ENVIRONMENTAL												
Memo: Percentage of construction and procurement costs based on detailed input from the project team for the LCB effort, OU 7-10 PIT-9 STAGE III LCB, estimate # 5974-1. Detailed input was back-calculated to arrive at a representative percentage of total construction and procurement costs. That percentage was applied to this estimated construction and procurement costs.												
	ENVIRONMENTAL		U.C. per \$ 140,235,135.00\$		0		\$0	\$0	\$0	\$0	0.063 \$8,820,790	0.063 \$8,820,790
Subtotal							\$0	\$0	\$0	\$0	\$8,820,790	\$8,820,790
Sales Tax							\$0	\$0	\$0	\$0	\$0	\$0
INEEUSubcontractorOverheads							\$0	\$0	\$0	\$0	\$0	\$0
Subtotal Estimate							\$0	\$0	\$0	\$0	\$1,178,458	\$8,820,790
Escalation							\$0	\$0	\$0	\$0	\$7,337,404	\$1,178,458
Contingency							\$0	\$0	\$0	\$0	\$0	\$7,337,404
—Total 1.01 ENVIRONMENTAL					0		\$0	\$0	\$0	\$0	\$17,336,651	\$17,336,651

1.02 SAFETY ANALYSIS

Memo: Percentage of construction and procurement costs based on detailed input from the project team for the LCB effort, **OU 7-10 PIT-9 STAGE III** LCB, estimate # 5974-1. Detailed input was back-calculated to arrive at a representative percentage of total construction and procurement costs. That percentage was applied to this estimated construction and procurement costs.

	SAFETY ANALYSIS		U.C. per \$ 140,235,135.00\$		0		\$0	\$0	\$0	\$0	0.01 \$1,430,398	0.01 \$1,430,398
Subtotal							\$0	\$0	\$0	\$0	\$1,430,398	\$1,430,398
Sales Tax							\$0	\$0	\$0	\$0	\$0	\$0
INEEUSubcontractorOverheads							\$0	\$0	\$0	\$0	\$0	\$0
Subtotal Estimate							\$0	\$0	\$0	\$0	\$191,101	\$1,430,398
Escalation							\$0	\$0	\$0	\$0	\$1,189,849	\$191,101
Contingency							\$0	\$0	\$0	\$0	\$0	\$1,189,849
—Total 1.02 SAFETY ANALYSIS					0		\$0	\$0	\$0	\$0	\$2,811,349	\$2,811,349

DETAIL ITEM REPORT

Project Name: **OU 7-10 Staged Interim Action**
Stage III Project-Treatment-Max Treat with TD (Re-escalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
1.03 SAFETY & HEALTH												
Memo: Percentage of construction and procurement costs based on detailed input from the project team for the LCB effort, OU 7-10 PIT-9 STAGE III - LCB , estimate # 5974-1. Detailed input was back-calculated to arrive at a representative percentage of total construction and procurement costs. That percentage was applied to this estimated construction and procurement costs.												
		U.C. per \$										
	SAFETY & HEALTH	140,235,135.00	\$		0		\$0	\$0	\$0	\$0	\$2,566,303	\$2,566,303
Subtotal							\$0	\$0	\$0	\$0	\$2,566,303	\$2,566,303
Sales Tax							\$0	\$0	\$0	\$0	\$0	\$0
INEEUSubcontractor Overheads							\$0	\$0	\$0	\$0	\$0	\$0
Subtotal Estimate												\$2,566,303
Escalation							\$0	\$0	\$0	\$0	\$342,858	\$342,858
Contingency							\$0	\$0	\$0	\$0	\$2,134,730	\$2,134,730
— Total 1.03 SAFETY & HEALTH					0		\$0	\$0	\$0	\$0	\$5,043,891	\$5,043,891

1.04 FIRE PROTECTION

Memo: Percentage of Construction and procurement costs based on detailed input from the project team for the LCB effort, **OU 7-10 PIT-9 STAGE III - LCB**, estimate # 5974-1. Detailed input was back-calculated to arrive at a representative percentage of total construction and procurement costs. That percentage was applied to this estimated construction and procurement costs.

		U.C. per \$										
	FIRE PROTECTION	140,235,135.00	\$		0		\$0	\$0	\$0	\$0	\$210,353	\$210,353
Subtotal							\$0	\$0	\$0	\$0	\$210,353	\$210,353
Sales Tax							\$0	\$0	\$0	\$0	\$0	\$0
INEEUSubcontractor Overheads							\$0	\$0	\$0	\$0	\$0	\$0
Subtotal Estimate												\$210,353
Escalation							\$0	\$0	\$0	\$0	\$28,103	\$28,103
Contingency							\$0	\$0	\$0	\$0	\$174,978	\$174,978
--Total 1.04 FIRE PROTECTION					0		\$0	\$0	\$0	\$0	\$413,434	\$413,434

DETAIL ITEM REPORT

Project Name: **OU 7-70 Staged Interim Action**
Stage III Project-Treatment-Max Treat with TD (Re-escalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
1.05 RADIOLOGICAL CONTROLS												
Memo: Percentage of construction and procurement costs based on detailed input from the project team for the LCB effort, OU 7-10 PIT-9 STAGE III - LCB, estimate# 5974-1. Detailed input was back-calculated to arrive at a representative percentage of total construction and procurement costs. That percentage was applied to this estimated construction and procurement costs.												
	RADIOLOGICAL CONTROLS	U.C. per \$	140,235,135.00	\$	0		0	0	0	0	0.005	0.005
							\$0	\$0	\$0	\$0	\$771,293	\$771,293
Subtotal							\$0	\$0	\$0	\$0	\$771,293	\$771,293
Sales Tax							\$0	\$0	\$0	\$0	\$0	\$0
INEEUSubcontractor Overheads		0.00%					\$0	\$0	\$0	\$0	\$0	\$0
Subtotal Estimate												5771,293
Escalation							\$0	\$0	\$0	\$0	\$103,045	\$103,045
Contingency							\$0	\$0	\$0	\$0	\$641,585	\$641,585
---Total	1.05 RADIOLOGICAL CONTROLS				0		\$0	\$0	\$0	\$0	\$1,515,923	\$1,515,923

1.07 EMERGENCY PLANNING

Memo: Percentage of construction and procurement costs based on detailed input from the project team for the LCB effort, **OU 7-10 PIT-9 STAGE III** - LCB, estimate# 5974-1. Detailed input was back-calculated to arrive at a representative percentage of total construction and procurement costs. That percentage was applied to this estimated construction and procurement costs.

	EMERGENCY PLANNING	U.C. per \$	140,235,135.00	\$	0		0	0	0	0	0	0
							\$0	\$0	\$0	\$0	\$28,047	\$28,047
Subtotal							\$0	\$0	\$0	\$0	\$28,047	\$28,047
Sales Tax							\$0	\$0	\$0	\$0	\$0	\$0
INEEUSubcontractor Overheads		0.00%					\$0	\$0	\$0	\$0	\$0	\$0
Subtotal Estimate												\$28,047
Escalation							\$0	\$0	\$0	\$0	\$3,747	\$3,747
Contingency							\$0	\$0	\$0	\$0	\$23,330	\$23,330
---Total	1.07 EMERGENCY PLANNING				0		\$0	\$0	\$0	\$0	\$55,124	\$55,124

DETAIL ITEM REPORT

Project Name: ***OU 7-70 Staged Interim Action
Stage III Project-Treatment-Max Treat with TD (Re-escalated)***
Project Location: ***INEEL-RWMC***
Estimate Number: ***5974-2 (4a+3aP)***

Client: **S. L. Austad**
Prepared By: **R. D. Adams / S. N. Wasley**
Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>	
1.08 SAFEGUARDS & SECURITY													
<i>Memo: Percentage of construction and procurement costs based on detailed input from the project team for the LCB effort, OU 7-10 PIT-9 STAGE 111• LCB, estimate # 5974•1. Detailed input was back-calculated to arrive at a representative percentage of total construction and procurement costs. That percentage was applied to this estimated construction and procurement costs.</i>													
	SAFEGUARDS & SECURITY	U.C. per \$	140,235,135.00	\$	0		\$0	\$0	\$0	\$0	\$0	\$42,071	\$42,071
Subtotal							\$0	\$0	\$0	\$0	\$42,071	\$42,071	
Sales Tax							\$0	\$0	\$0	\$0	\$0	\$0	
INEEUSubcontractorOverheads							0.00%	\$0	\$0	\$0	\$0	\$0	
Subtotal Estimate												\$42,071	
Escalation							\$0	\$0	\$0	\$0	\$5,621	\$5,621	
Contingency							\$0	\$0	\$0	\$0	\$34,996	\$34,996	
— Total 1.08 SAFEGUARDS & SECURITY					0		\$0	\$0	\$0	\$0	\$02,687	\$82,687	

1.09 QUALITY

Memo: Percentage of construction and procurement costs based on detailed input from the project team for the LCB effort, OU 7-10 PIT-9 STAGE III - LCB, estimate # 5974-1. Also considered were percentage allowances derived by the project team on the CSIX/TRU Grout Feasibility Study, produced by Washington Group International, December, 2000. Where large discrepancies occurred, an average of the two percentages was applied here.

QUALITY	U.C. per \$	0	0	0	0	0.03	0.03
	140,235,135.00 \$	0	\$0	\$0	\$0	\$0	\$4,207,054
Subtotal			\$0	\$0	\$0	\$0	\$4,207,054
Sales Tax			\$0	\$0	\$0	\$0	\$0
INEEUSubcontractorOverheads	0.00%		\$0	\$0	\$0	\$0	\$0
Subtotal Estimate							\$4,207,054
Escalation			\$0	\$0	\$0	\$0	\$562,062
Contingency			\$0	\$0	\$0	\$0	\$3,499,557
—Total 1.09 QUALITY		0	\$0	\$0	\$0	\$0	\$8,268,673

DETAIL ITEM REPORT

Project Name: **OU 7-70 Staged Interim Action
Stage III Project-Treatment- Max Treat with TD (Re-escalated)**
Project Location: **INEEL-RWMC**
Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
Prepared By: **R. D. Adams / S. N. Wasley**
Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>EquipDment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
2.01 CONCEPTUAL DESIGN/R&D												
<i>Memo: Percentage of construction and procurement costs based on detailed input from the project team for the LCB effort, OU 7-10 PIT-9 STAGE III- LCB, estimate # 5974-1. Also considered were percentage allowances derived by the project team on the CSIX/TRU Grout Feasibility Study, produced by Washington Group International, December, 2000. Where large discrepancies occurred, an average of the two percentages was applied here.</i>												
	CONCEPTUAL DESIGN EFFORT											
			U.C. per \$									
			140,235,135.00	\$	0		\$0	\$0	\$0	\$5,609,405	\$0	\$5,609,405
	R&D/TECH D ACTIVITIES											
			U.C. per LS									
			1.00	LS	0		\$0	\$0	\$0	\$0	\$12,000,000	\$12,000,000
<hr/>												
	Subtotal						\$0	\$0	\$0	\$5,609,405	\$12,000,000	\$17,609,405
	Sales Tax						\$0	\$0	\$0	\$0	\$0	\$0
	INEEL/Subcontractor Overheads		0.00%				\$0	\$0	\$0	\$0	\$0	\$0
<hr/>												
	Subtotal Estimate											\$17,609,405
	Escalation						\$0	\$0	\$0	\$301,225	\$644,400	\$945,625
	Contingency						\$0	\$0	\$0	\$5,770,475	\$12,344,571	\$18,115,046
<hr/>												
—Total 2.01 CONCEPTUAL DESIGN/R&D					0		\$0	\$0	\$0	\$11,681,106	\$24,988,971	\$36,670,077
<hr/>												
2.02 PRELIMINARY DESIGN												
<i>Memo: Percentage of construction and procurement costs based on detailed input from the project team for the LCB effort, OU 7-10 PIT-9 STAGE III- LCB, estimate # 5974-1. Also considered were percentage allowances derived by the project team on the CSIX/TRU Grout Feasibility Study, produced by Washington Group International, December, 2000. Where large discrepancies occurred, an average of the two percentages was applied here.</i>												
	PRELIMINARY DESIGN											
			U.C. per \$									
			140,235,135.00	\$	0		\$0	\$0	\$0	\$8,414,108	\$0	\$8,414,108
<hr/>												
	Subtotal						\$0	\$0	\$0	\$8,414,108	\$0	\$8,414,108
	Sales Tax						\$0	\$0	\$0	\$0	\$0	\$0
	INEEL/Subcontractor Overheads		0.00%				\$0	\$0	\$0	\$0	\$0	\$0
<hr/>												
	Subtotal Estimate											\$8,414,108
	Escalation						\$0	\$0	\$0	\$682,384	\$0	\$682,384
	Contingency						\$0	\$0	\$0	\$8,880,793	\$0	\$8,880,793
<hr/>												
—Total 2.02 PRELIMINARY DESIGN					0		\$0	\$0	\$0	\$17,977,285	\$0	\$17,977,285

DETAIL ITEM REPORT

Project Name: **OU 7-70 Staged Interim Action**
Stage 111 Project-Treatment- Max Treat with TD (Re-escalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
<u>2.03 FINAL DESIGN</u>												
Memo: Percentage of construction and procurement casts based on detailed input from the project team for the LCB effort, OU 7-10 PIT-9 STAGE III - LCB, estimate # 5974-1 . Also considered were percentage allowances derived by the project team on the CSIX/TRU Grout Feasibility Study, produced by Washington Group International, December, 2000. Where large discrepancies occurred, an average of the two percentages was applied here.												
	FINAL DESIGN					U.C. per \$	0	0	0	0	0.1	0.1
			140,235,135.00	\$	0		\$0	\$0	\$0	\$0	\$,***,***	\$14,023,514
Subtotal							\$0	\$0	\$0	\$0	\$14,023,514	\$14,023,514
Sales Tax							\$0	\$0	\$0	\$0	\$0	\$0
INEEUSubcontractor Overheads							0.00%	\$0	\$0	\$0	\$0	\$0
Subtotal Estimate												\$14,023,514
Escalation							\$0	\$0	\$0	\$0	\$1,500,516	\$1,500,516
Contingency							\$0	\$0	\$0	\$0	\$15,155,918	\$15,155,918
— Total 2.03 FINAL DESIGN					0		\$0	\$0	\$0	\$0	\$30,679,947	\$30,679,947

2.04 TRANSURANIC REPORTING SYSTEM (TRIPS)

	TRIPS DEVELOPMENT					U.C. per LS	0	0	0	0	16600000	16600000
			1.00	LS	0		\$0	\$0	\$0	\$0	\$,***,***	\$16,600,000
Memo: Based on input from B. L. Peterson of historic costs incurred in the development of the Transuranic Reporting System for the 3100 Cubic Meter project. Adjustments were made to remove costs in support of operations.												
Subtotal							\$0	\$0	\$0	\$0	\$16,600,000	\$16,600,000
Sales Tax							\$0	\$0	\$0	\$0	\$0	\$0
INEEUSubcontractor Overheads							0.00%	\$0	\$0	\$0	\$0	\$0
Subtotal Estimate												\$16,600,000
Escalation							\$0	\$0	\$0	\$0	\$3,132,420	\$3,132,420
Contingency							\$0	\$0	\$0	\$0	\$19,264,517	\$19,264,517
— Total 2.04 TRANSURANIC REPORTING SYSTEM (TRIPS)					0		\$0	\$0	\$0	\$0	\$38,996,937	\$38,996,937

3.1 PROCUREMENT MANAGEMENT

	PROCUREMENT SUPPORT					U.C. per \$	0	0	0	0	0.016	0.016
			140,235,135.00	\$	0		\$0	\$0	\$0	\$0	\$2,271,809	\$2,271,809

DETAIL ITEM REPORT

Project Name: **OU 7-10 Staged Interim Action**
Stage III Project-Treatment-Max Treat with TD (Re-escalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
3.1 PROCUREMENT MANAGEMENT												
	Subtotal							\$0	\$0	\$0	\$0	\$2,271,809
	Sales Tax							\$0	\$0	\$0	\$0	\$0
	INEEUSubcontractor Overheads	0.00%						\$0	\$0	\$0	\$0	\$0
	Subtotal Estimate											\$2,271,809
	Escalation							\$0	\$0	\$0	\$303,514	\$303,514
	Contingency							\$0	\$0	\$0	\$1,577,513	\$1,577,513
--Total 3.1 PROCUREMENT MANAGEMENT					0			\$0	\$0	\$0	\$0	\$4,152,836

3.2.01.01 WRPF EQUIPMENT

	Sorting table walking floor	U.C. per EA	6.00	EA	0			0	0	92000	0	0	92000
								\$0	\$0	\$552,000	\$0	\$0	\$552,000
Memo: Based on a 6/24/03 quote from Keith Walking Floor Systems. Copy in estimate file.													
	tbd - box dumper or walking floor	U.C. per EA	1.00	EA	0			0	0	513000	0	0	513000
								\$0	\$0	\$513,000	\$0	\$0	\$513,000
Memo: Assume similar to above (4 sections only) with a heavy stainless steel chute housing. See basis worksheet in estimate file													
	Sorting Deck Soils Trough Hopper	U.C. per EA	1.00	EA	0			0	0	89714	0	0	89714
								\$0	\$0	\$89,714	\$0	\$0	\$89,714
Memo: See basis worksheet in estimate file.													
	Sorting Deck Bridge Crane 7.5 TON	U.C. per EA	1.00	EA	0			0	0	434229	0	0	434229
								\$0	\$0	\$434,229	\$0	\$0	\$434,229
Memo: 2000 quote from PaR. Escalated and site-adjusted. See basis worksheet in estimate file.													
	Sorting Deck Sorting Arm 2 TON	U.C. per EA	3.00	EA	0			0	0	268000	0	0	268000
								\$0	\$0	\$804,000	\$0	\$0	\$804,000
Memo: 7/1/2003 quote from Caterpillar. See estimate file.													
	Sorting deck Soil Collection Conveyor	U.C. per EA	1.00	EA	0			0	0	450000	0	0	450000
								\$0	\$0	\$450,000	\$0	\$0	\$450,000
Memo: 6/26/03 Jervis B. Webb Company quote for a 130 conveyor. Used \$3750/lf. as basis for all conveyors. See estimate file.													

DETAIL ITEM REPORT

Project Name: OU 7-70 Staged Interim Action
 Stage III Project-Treatment-Max Treat with TD (Reescalated)
 Project Location: INEEL-RWMC
 Estimate Number: 5974-2 (4a+3aP)

Client: S. L. Austad
 Prepared By: R. D. Adams / S. N. Wasiey
 Estimate Type: Project Support

Code	Description	Contractor	Qty	UOM	Hrs	Resource	Labor	Equipment	Material	Subcontractor	Other	TOTAL
<u>3.2.01.01 WRPf EQUIPMENT</u>												
	Soil Screen Feed Conveyor		1.00	EA	0				485000	0	0	485000
	Memo: 6/26/03 Servis B. Webb Company quote for a 130 conveyor. Used \$3750/lb. as basis for all conveyors. See estimate file.											
									\$0	\$0	\$0	\$485,000
	Soil Screen Enclosure		1.00	EA	0				4694976	0	0	4694976
									\$0	\$0	\$0	\$4,694,976
	Soil Screen		1.00	EA	0				50347	0	0	50347
	Memo: See estimate file.											
									\$0	\$0	\$0	\$50,347
	Soil Screen Maintenance Crane 5 TON		1.00	EA	0				264213	0	0	264213
	Memo: 9/2000 PaR quote with an allowance for a motorized hook. See estimate file.											
									\$0	\$0	\$0	\$264,213
	Shredder Feed Conveyor		1.00	EA	0				485000	0	0	485000
									\$0	\$0	\$0	\$485,000
	Oversize Mat'l Xfer Conveyor		1.00	EA	0				112500	0	0	112500
									\$0	\$0	\$0	\$112,500
	Oversize Mat'l Enclosure		1.00	EA	0				9345600	0	0	9345600
									\$0	\$0	\$0	\$9,345,600
	Shear Feed Conveyor		1.00	EA	0				37500	0	0	37500
									\$0	\$0	\$0	\$37,500
	Oversize Mat'l Shear		1.00	EA	0				500000	0	0	500000
									\$0	\$0	\$0	\$500,000
	Sizing Cell Crane 5 TON		1.00	EA	0				264213	0	0	264213
									\$0	\$0	\$0	\$264,213
	Shear Discharge Conveyor		1.00	EA	0				18750	0	0	18750
									\$0	\$0	\$0	\$18,750
	Sized Mat'l Output Station		1.00	EA	0				100700	0	0	100700
	Memo: 9/2000 quote from Engineered Conveyors, Inc., escalated to today. See estimate file.											
									\$0	\$0	\$0	\$100,700

DETAIL ITEM REPORT

Project Name: **OU 7-10 Staged Interim Action**
Stage III projecr-Treatment- Max Treat with TD (Re-escalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
3.2.01.01 WRPf EQUIPMENT												
	Intact Drum/Special Mat'l Xfer Conveyor		1.00	EA	0		0	0	37500	0	0	37500
		<i>U.C. per EA</i>					\$0	\$0	\$37,500	\$0	\$0	\$37,500
	Intact Drum & Special Mat'l Enclosure		1.00	EA	0		0	0	5000000	0	0	5000000
		<i>U.C. per EA</i>					\$0	\$0	\$5,000,000	\$0	\$0	\$5,000,000
	Memo: As suggested by M. Stacey based on similar arrangement for the 3100 Cubic Meter project. E-mail in estimate file.											
	Intact Drum Handler		1.00	LOT	0		0	0	5000000	0	0	5000000
		<i>U.C. Der LOT</i>					\$0	\$0	\$5,000,000	\$0	\$0	\$5,000,000
	Memo: As suggested by M. Stacey based on similar arrangement for the 3100 Cubic Meter project. E-mail in estimate file. Price includes sorting manipulator and drum contents sorting table											
	Drum Contents Collecting Conveyor		1.00	EA	0		0	0	37500	0	0	37500
		<i>U.C. per EA</i>					\$0	\$0	\$37,500	\$0	\$0	\$37,500
	Special Mat'l Output Station		1.00	EA	0		0	0	100700	0	0	100700
		<i>U.C. per EA</i>					\$0	\$0	\$100,700	\$0	\$0	\$100,700
	Container Assay Unit		3.00	EA	0		0	0	3500000	0	0	3500000
		<i>U.C. per EA</i>					\$0	\$0	\$10,500,000	\$0	\$0	\$10,500,000
	Memo: Cost were based on information received from BNFL Instruments Physics Group Lead (E-mail 6-30-03), included in estimating file.											
	Drum Contents Xfer Conveyor		1.00	EA	0		0	0	37500	0	0	37500
		<i>U.C. per EA</i>					\$0	\$0	\$37,500	\$0	\$0	\$37,500
	Soil Screen Product Xfer conveyor		1.00	EA	0		0	0	337500	0	0	337500
		<i>U.C. per EA</i>					\$0	\$0	\$337,500	\$0	\$0	\$337,500
	Soil Screen Rejects Xfer conveyor		1.00	EA	0		0	0	262500	0	0	262500
		<i>U.C. per EA</i>					\$0	\$0	\$262,500	\$0	\$0	\$262,500
	Shredder Enclosure		1.00	EA	0		0	0	360076	0	0	360076
		<i>U.C. per EA</i>					\$0	\$0	\$360,076	\$0	\$0	\$360,076
	2 Stage Shredder		1.00	EA	0		0	0	1400000	0	0	1400000
		<i>U.C. per EA</i>					\$0	\$0	\$1,400,000	\$0	\$0	\$1,400,000
	Memo: 5/16/2003 quote from SSI Shredding Systems, Inc. See estimate file											
	Shredded Waste Xfer conveyor		1.00	EA	0		0	0	187500	0	0	187500
		<i>U.C. per EA</i>					\$0	\$0	\$187,500	\$0	\$0	\$187,500

DETAIL ITEM REPORT

Project Name: **OU 7-70 Staged Interim Action**
Stage III Project-Treatment-Max Treat with TD (Re-escalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
3.2.01.01 WRPF EQUIPMENT												
		<i>U.C. per EA</i>					0	0	993933	0	0	993933
	Shredded Waste Packaging Glove Box		1.00	EA	0		\$0	\$0	\$993,933	\$0	\$0	\$993,933
	Memo: Based on two GEM project Packaging Glovebox Systems.											
		<i>U.C. per EA</i>					0	0	1300000	0	0	1300000
	Drum Filling Conveyor		2.00	EA	0		\$0	\$0	\$2,600,000	\$0	\$0	\$2,600,000
	Memo: Price by engineering.											
		<i>U.C. per EA</i>					0	0	100700	0	0	100700
	Shredded Waste Output Station		2.00	EA	0		\$0	\$0	\$201,400	\$0	\$0	\$201,400
		<i>U.C. per EA</i>					0	0	167971	0	0	167971
	Shredded Waste GB Maintenancecrane 1TON		1.00	EA	0		\$0	\$0	\$167,971	\$0	\$0	\$167,971
	Memo: 4/25/2003 quote from American Crane plus allowance for motorized hook rotator and site factor.											
		<i>U.C. per EA</i>					0	0	5588409	0	0	5588409
	Soil Hopper Enclosure		1.00	EA	0		\$0	\$0	\$5,588,409	\$0	\$0	\$5,588,409
		<i>U.C. per EA</i>					0	0	37500	0	0	37500
	Soil Storage Feed Conveyor		1.00	EA	0		\$0	\$0	\$37,500	\$0	\$0	\$37,500
		<i>U.C. per EA</i>					0	0	10000	0	0	10000
	Soil Storage Bin		2.00	EA	0		\$0	\$0	\$20,000	\$0	\$0	\$20,000
	Memo: Allowance.											
		<i>U.C. per EA</i>					0	0	8777	0	0	8777
	Soil Storage Bin Activator		2.00	EA	0		\$0	\$0	\$17,554	\$0	\$0	\$17,554
	Memo: From Richardson, 100-35, pg. 3-4, with adjustments for stainless steel construction, escalation and site factor.											
		<i>U.C. per EA</i>					0	0	150000	0	0	150000
	Soil Storage Bin Discharge Conveyor		2.00	EA	0		\$0	\$0	\$300,000	\$0	\$0	\$300,000
		<i>U.C. per EA</i>					0	0	30000	0	0	30000
	Assay Systems feed conveyor		1.00	EA	0		\$0	\$0	\$30,000	\$0	\$0	\$30,000
		<i>U.C. per EA</i>					0	0	18285	0	0	18285
	Assay Feed Spreader #1		2.00	EA	0		\$0	\$0	\$36,570	\$0	\$0	\$36,570

DETAIL ITEM REPORT

Project Name: **OU 7-10 Staged Interim Action**
Stage 111 Project-Treatment-Max Treat with TD (Re-escalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>EquiDment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
3.2.01.01 WRPF EQUIPMENT												
	Soil Assay System #2		2.00	EA	0		0	0	1000000	0	0	1000000
Memo: 6/30/2003 quote from BNFL Instruments. ConveyorizedSurvey Monitor as described in note 2 of their quote. See estimate file.												
	Assayed Soil Diverting Conveyor		1.00	EA	0		0	0	112500	0	0	112500
	nonTRU Soil Xfer Conveyor		1.00	EA	0		0	0	168750	0	0	168750
	TRU Soil Xfer Conveyor		1.00	EA	0		0	0	168750	0	0	168750
	nonTRU Soil Packaging GB		1.00	EA	0		0	0	233026	0	0	233026
	nonTRU Soil Packaging GB		1.00	EA	0		0	0	233026	0	0	233026
	TRU Soil Packaging GB		1.00	EA	0		0	0	233026	0	0	233026
	TRU Soil Packaging GB		1.00	EA	0		0	0	233026	0	0	233026
	CONTAINER HANDLING TRUCK (1000 LBS)		5.00	EA	0		0	0	3000	0	0	3000

DETAIL ITEM REPORT

Project Name: **OU 7-70 Staged Interim Action**
 Stage 111 **Project-Treatment- Max Treat with TD(Re-escalated)**
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
<u>3.2.01.01 WRPF EQUIPMENT</u>												
	TRUPACT LOADING STATION • INCL. LOADING CRANE		1.00	EA	0		0 \$0	0 \$0	648000 \$648,000	0 \$0	0 \$0	648000 \$648,000
	Subtotal						\$0	\$0	\$56,500,959	\$0	\$0	\$56,500,959
	Sales Tax						\$0	\$0	\$3,390,058	\$0	\$0	\$3,390,058
	INEEUSubcontractor Overheads	0.00%					\$0	\$0	\$0	\$0	\$0	\$0
	Subtotal Estimate											\$59,891,017
	Escalation						\$0	\$0	\$8,001,440	\$0	\$0	\$8,001,440
	Contingency						\$0	\$0	\$41,587,506	\$0	\$0	\$41,587,506
—Total 3.2.01.01 WRPF EQUIPMENT					0		\$0	\$0	\$**, ***, ***	\$0	\$0	\$**, ***, ***

3.2.01.02 WRPF-HVAC EQUIPMENT

Memo: *Costs for the majority of the HVAC equipment were obtained from the BBWI Engineering group that contacted a local HVAC vendor that provided budgetary cost information based on preliminary design information.*

	1000 kW HEATER SECTION (PREHEAT)		1.00	EA	0		0 \$0	0 \$0	5000 \$5,000	0 \$0	0 \$0	5000 \$5,000
	INLET HEPA FILTER TRAIN 6X4 (1,500 CFM/ FILTER)		2.00	EA	0		0 \$0	0 \$0	160000 \$320,000	0 \$0	0 \$0	160000 \$320,000
Memo. The cost for this filter train includes, inlet isolation dampers, prefilter section, test inlet, HEPA filters, test outlet, & outlet isolation damper.												
	OUTLET HEPA FILTER TRAIN 6X4 (1,500 CFM/ FILTER)		2.00	EA	0		0 \$0	0 \$0	390000 \$780,000	0 \$0	0 \$0	390000 \$780,000
Memo. The cost for this filter train includes: inlet isolation dampers, mist eliminator, TI, charcoal filter, heater section (RH control), prefilter section, test inlet, HEPA filters, test combination, & outlet isolation damper.												
	MAIN EXHAUST FAN (62,500 CFM- 300 HP)		1.00	EA	0		0 \$0	0 \$0	23000 \$23,000	0 \$0	0 \$0	23000 \$23,000
	BACK-UP EXHAUST FAN (11,000 CFM-200 HP)		1.00	EA	0		0 \$0	0 \$0	11000 \$11,000	0 \$0	0 \$0	11000 \$11,000
	RADIANT HEATERS 13.5 KW		18.00	EA	0		0 \$0	0 \$0	950 \$17,100	0 \$0	0 \$0	950 \$17,100

DETAIL ITEM REPORT

Project Name: **OU 7-70 Staged Interim Action**
Stage III Project-Treatment-Max Treat with TD (Re-escalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
<u>3.2.01.02WRPF-HVAC EQUIPMENT</u>												
<i>Memo: Costs for the majority of the HVAC equipment were obtained from the BBWM Engineering group that contacted a local HVAC vendor that provided budgetary cost information based on preliminary design information.</i>												
	COMPUTER ROOM AC UNIT (10 TON GLYCOL UNIT)											
		U.C. per EA										
			1.00	EA	0		\$0	\$0	\$32,000	\$0	\$0	\$32,000
<hr/>												
	Subtotal						\$0	\$0	\$1,188,100	\$0	\$0	\$1,188,100
	Sales Tax						\$0	\$0	\$71,286	\$0	\$0	\$71,286
	INEEUSubcontractorOverheads	0.00%					\$0	\$0	\$0	\$0	\$0	\$0
<hr/>												
	Subtotal Estimate											\$1,259,386
	Escalation						\$0	\$0	\$168,254	\$0	\$0	\$168,254
	Contingency						\$0	\$0	\$874,500	\$0	\$0	\$874,500
<hr/>												
— Total	3.2.01.02WRPF-HVAC EQUIPMENT				0		\$0	\$0	\$2,302,140	\$0	\$0	\$2,302,140

3.2.01.03 WRPF I&C PROCUREMENT

Memo: Based in cost information provided by the BBWM Design I&C group, estimate file contains back-up spread sheet identifying how these costs were developed.

	INSTRUMENT & CONTROLS											
		U.C. per LS										
			1.00	LS	0		\$0	\$0	\$160,900	\$0	\$0	\$160,900
<hr/>												
	Subtotal						\$0	\$0	\$160,900	\$0	\$0	\$160,900
	Sales Tax						\$0	\$0	\$9,654	\$0	\$0	\$9,654
	INEEUSubcontractorOverheads	0.00%					\$0	\$0	\$0	\$0	\$0	\$0
<hr/>												
	Subtotal Estimate											\$170,554
	Escalation						\$0	\$0	\$22,786	\$0	\$0	\$22,786
	Contingency						\$0	\$0	\$118,430	\$0	\$0	\$118,430
<hr/>												
— Total	3.2.01.03WRPF I&C PROCUREMENT				0		\$0	\$0	\$311,770	\$0	\$0	\$311,770

5.2.05.01CHEM LEACH - LEACH/PRECIPITATE/CALCINE

	Transfer auger											
		U.C. per EA										
			1.00	EA	0		\$0	\$0	\$20,970	\$0	\$0	\$20,970

DETAIL ITEM REPORT

Project Name: *OU 7-10 Staged Interim Action*
Stage III Project-Treatment-Max Treat with TD (Re-escalated)
 Project Location: *INEEL-RWMC*
 Estimate Number: *5974-2 (4a+3aP)*

Client: *S. L. Austad*
 Prepared By: *R. D. Adams / S. N. Wasley*
 Estimate Type: *Project Support*

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
<u>3.2.05.01 CHEM LEACH - LEACH/PRECIPITATE/CALCINE</u>												
	Hot soil screen	<i>U.C. per EA</i>	1.00	EA	0		<i>0</i> \$0	<i>0</i> \$0	<i>17885</i> \$17,885	<i>0</i> \$0	<i>0</i> \$0	<i>17885</i> \$17,885
	Thermal Desorber surge Bin	<i>U.C. per EA</i>	1.00	EA	0		<i>0</i> \$0	<i>0</i> \$0	<i>18590</i> \$18,590	<i>0</i> \$0	<i>0</i> \$0	<i>18590</i> \$18,590
	Star valve	<i>U.C. per EA</i>	1.00	EA	0		<i>0</i> \$0	<i>0</i> \$0	<i>4500</i> \$4,500	<i>0</i> \$0	<i>0</i> \$0	<i>4500</i> \$4,500
	Transfer auger	<i>U.C. per EA</i>	1.00	EA	0		<i>0</i> \$0	<i>0</i> \$0	<i>5592</i> \$5,592	<i>0</i> \$0	<i>0</i> \$0	<i>5592</i> \$5,592
	Transfer auger	<i>U.C. per EA</i>	1.00	EA	0		<i>0</i> \$0	<i>0</i> \$0	<i>19931</i> \$19,931	<i>0</i> \$0	<i>0</i> \$0	<i>19931</i> \$19,931
	Transfer auger	<i>U.C. per EA</i>	1.00	EA	0		<i>0</i> \$0	<i>0</i> \$0	<i>6807</i> \$6,807	<i>0</i> \$0	<i>0</i> \$0	<i>6807</i> \$6,807
	Transfer auger	<i>U.C. per EA</i>	1.00	EA	0		<i>0</i> \$0	<i>0</i> \$0	<i>6807</i> \$6,807	<i>0</i> \$0	<i>0</i> \$0	<i>6807</i> \$6,807
	Leach Tank	<i>U.C. per EA</i>	1.00	EA	0		<i>0</i> \$0	<i>0</i> \$0	<i>27600</i> \$27,600	<i>0</i> \$0	<i>0</i> \$0	<i>27600</i> \$27,600
	Leach Tank	<i>U.C. per EA</i>	1.00	EA	0		<i>0</i> \$0	<i>0</i> \$0	<i>27600</i> \$27,600	<i>0</i> \$0	<i>0</i> \$0	<i>27600</i> \$27,600
	Leach Tank	<i>U.C. per EA</i>	1.00	EA	0		<i>0</i> \$0	<i>0</i> \$0	<i>27600</i> \$27,600	<i>0</i> \$0	<i>0</i> \$0	<i>27600</i> \$27,600
	Nitric acid feed tank	<i>U.C. per EA</i>	1.00	EA	0		<i>0</i> \$0	<i>0</i> \$0	<i>21353</i> \$21,353	<i>0</i> \$0	<i>0</i> \$0	<i>21353</i> \$21,353
	Nitric acid storage tank	<i>U.C. per EA</i>	2.00	EA	0		<i>0</i> \$0	<i>0</i> \$0	<i>92998</i> \$185,996	<i>0</i> \$0	<i>0</i> \$0	<i>92998</i> \$185,996
	Nitric acid feed pump	<i>U.C. per EA</i>	2.00	EA	0		<i>0</i> \$0	<i>0</i> \$0	<i>17553</i> \$35,106	<i>0</i> \$0	<i>0</i> \$0	<i>17553</i> \$35,106

DETAIL ITEM REPORT

Project Name: **OU 7-10 Staged Interim Action**
Stage III Project-Treatment-Max Treat with TD (Re-escalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
3.2.05.01 CHEM LEACH - LEACWPRECIPITATUCALCINE												
	Nitric acid transfer pump	<i>U.C. per EA</i>	2.00	EA	0		0 \$0	0 \$0	9747 \$19,494	0 \$0	0 \$0	9747 \$19,494
	Nitric acid heater	<i>U.C. per EA</i>	1.00	EA	0		0 \$0	0 \$0	50111 \$50,111	0 \$0	0 \$0	50111 \$50,111
	Slurry Pump	<i>U.C. per EA</i>	2.00	EA	0		0 \$0	0 \$0	140000 \$280,000	0 \$0	0 \$0	140000 \$280,000
	13 M Nitric storage tk. discharge valve	<i>U.C. per EA</i>	1.00	EA	0		0 \$0	0 \$0	3952 \$3,952	0 \$0	0 \$0	3952 \$3,952
	8 M nitric acid feed tk. discharge valve	<i>U.C. per EA</i>	1.00	EA	0		0 \$0	0 \$0	5256 \$5,256	0 \$0	0 \$0	5256 \$5,256
	Off-gas condenser	<i>U.C. per EA</i>	1.00	EA	0		0 \$0	0 \$0	14525 \$14,525	0 \$0	0 \$0	14525 \$14,525
	Leach tank mixer	<i>U.C. per EA</i>	1.00	EA	0		0 \$0	0 \$0	3500 \$3,500	0 \$0	0 \$0	3500 \$3,500
	Leach tank mixer	<i>U.C. per EA</i>	1.00	EA	0		0 \$0	0 \$0	3500 \$3,500	0 \$0	0 \$0	3500 \$3,500
	Leach tank mixer	<i>U.C. per EA</i>	1.00	EA	0		0 \$0	0 \$0	3500 \$3,500	0 \$0	0 \$0	3500 \$3,500
	Knife gate valve	<i>U.C. per EA</i>	1.00	EA	0		0 \$0	0 \$0	3000 \$3,000	0 \$0	0 \$0	3000 \$3,000
	Knife gate valve	<i>U.C. per EA</i>	1.00	EA	0		0 \$0	0 \$0	3000 \$3,000	0 \$0	0 \$0	3000 \$3,000
	Knife gate valve	<i>U.C. per EA</i>	1.00	EA	0		0 \$0	0 \$0	3000 \$3,000	0 \$0	0 \$0	3000 \$3,000
	Liquid Filler	<i>U.C. per EA</i>	1.00	EA	0		0 \$0	0 \$0	500000 \$500,000	0 \$0	0 \$0	500000 \$500,000

DETAIL ITEM REPORT

Project Name: *OU 7-70 Staged Interim Action*
Stage III Project-Treatment-Max Treat with TD (Re-escalated)
 Project Location: *INEEL-RWMC*
 Estimate Number: *5974-2 (4a+3aP)*

Client: *S. L. Austad*
 Prepared By: *R. D. Adams / S. N. Wasley*
 Estimate Type: *Project Support*

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
<u>3.2.05.01 CHEM LEACH - LEACWPRECIPITATUCALCINE</u>												
	Knife gate valve	<i>U.C. per EA</i>	1.00	EA	0		0 \$0	0 \$0	3000 \$3,000	0 \$0	0 \$0	3000 \$3,000
	Diverter valve	<i>U.C. per EA</i>	1.00	EA	0		0 \$0	0 \$0	10000 \$10,000	0 \$0	0 \$0	10000 \$10,000
	Blending tank	<i>U.C. per EA</i>	1.00	EA	0		0 \$0	0 \$0	27600 \$27,600	0 \$0	0 \$0	27600 \$27,600
	Blending tank mixer	<i>U.C. per EA</i>	1.00	EA	0		0 \$0	0 \$0	5000 \$5,000	0 \$0	0 \$0	5000 \$5,000
	Surge tank	<i>U.C. per EA</i>	1.00	EA	0		0 \$0	0 \$0	48853 \$48,853	0 \$0	0 \$0	48853 \$40,853
	Surge tank mixer	<i>U.C. per EA</i>	1.00	EA	0		0 \$0	0 \$0	5000 \$5,000	0 \$0	0 \$0	5000 \$5,000
	Return Pump	<i>U.C. per EA</i>	1.00	EA	0		0 \$0	0 \$0	2000 \$2,000	0 \$0	0 \$0	2000 \$2,000
	Blending tank discharge valve	<i>U.C. per EA</i>	1.00	EA	0		0 \$0	0 \$0	3952 \$3,952	0 \$0	0 \$0	3952 \$3,952
	Surge tank discharge valve	<i>U.C. per EA</i>	1.00	EA	0		0 \$0	0 \$0	3952 \$3,952	0 \$0	0 \$0	3952 \$3,952
	Calciner feed pump	<i>U.C. per EA</i>	2.00	EA	0		0 \$0	0 \$0	3000 \$6,000	0 \$0	0 \$0	3000 \$6,000
	Hollow flight tandum auger	<i>U.C. per EA</i>	1.00	EA	0		0 \$0	0 \$0	529548 \$529,548	0 \$0	0 \$0	529548 \$529,548
Memo: 7/2/03 quote from UNISCO Services, Inc.												
	Recycle auger	<i>U.C. per EA</i>	1.00	EA	0		0 \$0	0 \$0	40000 \$40,000	0 \$0	0 \$0	40000 \$40,000

DETAIL ITEM REPORT

Project Name: *OU 7-10 Staged Interim Action*
Stage III Project-Treatment- Max Treat with TD (Re-escalated)
 Project Location: *INEEL-RWMC*
 Estimate Number: *5974-2 (4a+3aP)*

Client: *S. L. Austad*
 Prepared By: *R. D. Adams / S. N. Wasley*
 Estimate Type: *Project Support*

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
<u>3.2.05.01 CHEM LEACH - LEACH/PRECIPITATE/CALCINE</u>												
	Star valve					<i>U.C. per EA</i>						
			1.00	EA	0		0 \$0	0 \$0	4500 \$4,500	0 \$0	0 \$0	4500 \$4,500
	Heated auger					<i>U.C. per EA</i>						
			1.00	EA	0		0 \$0	0 \$0	488000 \$488,000	0 \$0	0 \$0	488000 \$488,000
Memo: 7/2/03quote from UNISCO Services, Inc.												
	Star valve					<i>U.C. per EA</i>						
			1.00	EA	0		0 \$0	0 \$0	4500 \$4,500	0 \$0	0 \$0	4500 \$4,500
	Cooling auger					<i>U.C. per EA</i>						
			1.00	EA	0		0 \$0	0 \$0	164000 \$164,000	0 \$0	0 \$0	164000 \$164,000
	Transfer auger					<i>U.C. per EA</i>						
			1.00	EA	0		0 \$0	0 \$0	6807 \$6,807	0 \$0	0 \$0	6807 \$6,807
	Transfer auger					<i>U.C. per EA</i>						
			1.00	EA	0		0 \$0	0 \$0	6807 \$6,807	0 \$0	0 \$0	6807 \$6,807
	Transfer auger					<i>U.C. per EA</i>						
			1.00	EA	0		0 \$0	0 \$0	5600 \$5,600	0 \$0	0 \$0	5600 \$5,600
	Transfer auger					<i>U.C. per EA</i>						
			1.00	EA	0		0 \$0	0 \$0	15618 \$15,618	0 \$0	0 \$0	15618 \$15,618
	hot calcine surge bin					<i>U.C. per EA</i>						
			1.00	EA	0		0 \$0	0 \$0	9611 \$9,611	0 \$0	0 \$0	9611 \$9,611
	Star valve					<i>U.C. per EA</i>						
			1.00	EA	0		0 \$0	0 \$0	4500 \$4,500	0 \$0	0 \$0	4500 \$4,500
	Bridge Crane					<i>U.C. per EA</i>						
			1.00	EA	0		0 \$0	0 \$0	99495 \$99,495	0 \$0	0 \$0	99495 \$99,495
	Percipitate Filter					<i>U.C. per EA</i>						
			1.00	EA	0		0 \$0	0 \$0	500000 \$500,000	0 \$0	0 \$0	500000 \$500,000

DETAIL ITEM REPORT

Project Name: **OU 7-10 Staged Interim Action**
Stage III Project-Treatment-Max Treat with TD (Re-escalated)
Project Location: **INEEL-RWMC**
Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
Prepared By: **R. D. Adams / S. N. Wasley**
Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
3.2.05.01 CHEM LEACH - LEACH/PRECIPITATE/CALCINE												
	Knife gate valve	<i>U.C. per EA</i>	1.00	EA	0		0 \$0	0 \$0	3000 \$3,000	0 \$0	0 \$0	3000 \$3,000
	Container Loading Glovebox	<i>U.C. per EA</i>	1.00	EA	0		0 \$0	0 \$0	120000 \$120,000	0 \$0	0 \$0	120000 \$120,000
	Percipitater Tank	<i>U.C. per EA</i>	2.00	EA	0		0 \$0	0 \$0	35358 \$70,716	0 \$0	0 \$0	35358 \$70,716
	Percipitater Tank Mixer	<i>U.C. per EA</i>	2.00	EA	0		0 \$0	0 \$0	5000 \$10,000	0 \$0	0 \$0	5000 \$10,000
	Percipitate Pump	<i>U.C. per EA</i>	2.00	EA	0		0 \$0	0 \$0	17553 \$35,106	0 \$0	0 \$0	17553 \$35,106
	Surge Tank	<i>U.C. per EA</i>	1.00	EA	0		0 \$0	0 \$0	42005 \$42,005	0 \$0	0 \$0	42005 \$42,005
	Evaporator feed pump	<i>U.C. per EA</i>	1.00	EA	0		0 \$0	0 \$0	5624 \$5,624	0 \$0	0 \$0	5624 \$5,624
	Evaporator flash tank	<i>U.C. per EA</i>	1.00	EA	0		0 \$0	0 \$0	90000 \$90,000	0 \$0	0 \$0	90000 \$90,000
	Evaporator heat exchanger	<i>U.C. per EA</i>	1.00	EA	0		0 \$0	0 \$0	120000 \$120,000	0 \$0	0 \$0	120000 \$120,000
	Evaporator vapor superheater	<i>U.C. per EA</i>	1.00	EA	0		0 \$0	0 \$0	60000 \$60,000	0 \$0	0 \$0	60000 \$60,000
	Evaporator hold tank	<i>U.C. per EA</i>	1.00	EA	0		0 \$0	0 \$0	48013 \$48,013	0 \$0	0 \$0	48013 \$48,013
	Return Pump	<i>U.C. per EA</i>	1.00	EA	0		0 \$0	0 \$0	3256 \$3,256	0 \$0	0 \$0	3256 \$3,256
	Oxalic Acid feed tank	<i>U.C. per EA</i>	1.00	EA	0		0 \$0	0 \$0	4434 \$4,434	0 \$0	0 \$0	4434 \$4,434

DETAIL ITEM REPORT

Project Name: **OU 7-10 Staged Interim Action**
Stage III Project-Treatment- Max Treat with TD (Reescalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractu</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>EquiDment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
3.2.05.01 CHEM LEACH - LEACH/PRECIPITATE/CALCINE												
	50 % Caustic solution feed tank	<i>U.C. per EA</i>	1.00	EA	0		0 \$0	0 50	1786 51,786	0 \$0	0 \$0	1786 \$1,786
	50 % Caustic solution mix tank	<i>U.C. per EA</i>	1.00	EA	0		0 \$0	0 \$0	8364 \$8,364	0 50	0 \$0	8364 \$8,364
	Oxalic Acid mix tank	<i>U.C. per EA</i>	1.00	EA	0		0 \$0	0 \$0	61547 \$61,547	0 \$0	0 \$0	61547 \$61,547
	Oxalic Acid mixer	<i>U.C. per EA</i>	1.00	EA	0		0 50	0 \$0	12000 \$12,000	0 \$0	0 \$0	12000 \$12,000
	Caustic mixer	<i>U.C. per EA</i>	1.00	EA	0		0 \$0	0 \$0	12000 \$12,000	0 50	0 \$0	12000 \$12,000
	Ox Acid feed pump	<i>U.C. per EA</i>	2.00	EA	0		0 \$0	0 \$0	5540 \$11,080	0 \$0	0 \$0	5540 \$11,080
	Caustic feed pump	<i>U.C. per EA</i>	2.00	EA	0		0 \$0	0 \$0	897 \$1,794	0 50	0 \$0	897 \$1,794
	Caustic transfer pump	<i>U.C. per EA</i>	2.00	EA	0		0 \$0	0 50	897 \$1,794	0 50	0 \$0	897 \$1,794
	Ox Acid transfer pump	<i>U.C. per EA</i>	2.00	EA	0		0 \$0	0 \$0	5540 \$11,080	0 50	0 \$0	5540 \$11,080
	Ox crystal feeder	<i>U.C. per EA</i>	1.00	EA	0		0 50	0 \$0	22552 \$22,552	0 \$0	0 \$0	22552 \$22,552
	Caustic pellet feeder	<i>U.C. per EA</i>	1.00	EA	0		0 50	0 \$0	22552 \$22,552	0 \$0	0 \$0	22552 \$22,552
	Bulk Bag Ox crystal unloader	<i>U.C. per EA</i>	1.00	EA	0		0 \$0	0 \$0	10000 \$10,000	0 \$0	0 50	10000 \$10,000

DETAIL ITEM REPORT

Project Name: **OU 7-70 Staged Interim Action**
Stage III Project-Treatment-Max Treat with TD (Re-escalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
<u>3.2.05.01 CHEM LEACH-LEACH/PRECIPITATE/CALCINE</u>												
	Bulk Bag Caustic Pellet unloader	<i>U.C. per EA</i>	1.00	EA	0		\$0	\$0	10000 \$10,000	0 \$0	0 \$0	1000 \$10,000
Subtotal							\$0	\$0	\$4,112,221	\$0	\$0	\$4,112,221
Sales Tax							\$0	\$0	\$246,733	\$0	\$0	\$246,733
INEEUSubcontractor Overheads							\$0	\$0	\$0	\$0	\$0	\$0
Subtotal Estimate												\$4,358,954
Escalation							\$0	\$0	\$582,356	\$0	\$0	\$582,356
Contingency							\$0	\$0	\$3,026,798	\$0	\$0	\$3,026,798
— Total 3.2.05.01 CHEM LEACH - LEACH/PRECIPITATE/CALCINE					0		\$0	\$0	\$7,968,109	\$0	\$0	\$7,968,109

3.2.05.02 CHEM LEACH- BUILDINGPROCESS AREA HVAC

Memo: *Costs for the majority of the HVAC equipment were obtained from the BBWI Engineering group that contacted a local HVAC vendor that provided budgetary cost information based on preliminary design information.*

	AIR HANDLER, INCLUDING HEATING COIL (18,000 CFM)	<i>U.C. per EA</i>	4.00	EA	0		\$0	\$0	24000 \$96,000	0 \$0	0 \$0	24000 \$96,000
Memo: Cost are based on Richardsons, 2000 (sec. 15-8).												
	HEPA FILTER HOUSING (6W X 3H X SINGLE PASS)	<i>U.C. per EA</i>	4.00	EA	0		\$0	\$0	162000 \$648,000	0 \$0	0 \$0	162000 \$648,000
Memo: Costs are based on vendor information @ \$9,000/single pasdfilter.												
	EXHAUST FAN 40 HP (18,000CFM)	<i>U.C. per EA</i>	4.00	EA	0		\$0	\$0	25000 \$100,000	0 \$0	0 \$0	25000 \$100,000
	AIR HANDLER, INCLUDING HEATING COIL (16,000 CFM)	<i>U.C. per EA</i>	2.00	EA	0		\$0	\$0	12500 \$25,000	0 \$0	0 \$0	12500 \$25,000
Memo: Cost are based on Richardsons, 2000 (sec. 15-8).												
	HEPA FILTER HOUSING (5W X 3H X SINGLE PASS)	<i>U.C. per EA</i>	2.00	EA	0		\$0	\$0	135000 \$270,000	0 \$0	0 \$0	135000 \$270,000
Memo: Costs are based on vendor information @ \$9,000/single pasdfilter.												
	EXHAUST FAN 40 HP (16,000CFM)	<i>U.C. per EA</i>	2.00	EA	0		\$0	\$0	25000 \$50,000	0 \$0	0 \$0	25000 \$50,000

DETAIL ITEM REPORT

Project **Name:** *OU 7-10 Staged Interim Action
Stage III Project-Treatment-Max Treat with TD (Re-escalated)*
Project Location: *INEEL-RWMC*
Estimate Number: *5974-2 (4a+3aP)*

Client: *S. L. Austad*
Prepared By: *R. D. Adams / S. N. Wasley*
Estimate Type: *Project Support*

Code	Description	Contractor	Qty	UOM	Hrs	Resource	Labor	Equipment	Material	Subcontractor	Other	TOTAL
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3.2.05.02 CHEM LEACH - BUILDING/PROCESS AREA HVAC

Memo: *Costs for the majority of the HVAC equipment were obtained from the BBWI Engineering group that contacted a local HVAC vendor that provided budgetary cost information based on preliminary design information.*

		<i>U.C. per EA</i>					0	0	270000	0	0	270000
HEPA FILTER HOUSING (6W X 3H X DOUBLE PASS)	4.00	EA	0				\$0	\$0	\$1,080,000	\$0	\$0	\$1,080,000
Memo: Costs are based on vendor information @ \$15,000/double pasdfilter.												
		<i>U.C. per EA</i>					0	0	37000	0	0	37000
EXHAUST FAN 60 HP (18,000 CFM)	4.00	EA	0				\$0	\$0	\$148,000	\$0	\$0	\$148,000
		<i>U.C. per EA</i>					0	0	360000	0	0	360000
HEPA FILTER HOUSING (6W X 4H X DOUBLE PASS)	1.00	EA	0				\$0	\$0	\$360,000	\$0	\$0	\$360,000
Memo: Costs are based on vendor information @ \$15,000/double pasdfilter.												
		<i>U.C. per EA</i>					0	0	42000	0	0	42000
EXHAUST FAN 75 HP (24,000 CFM)	1.00	EA	0				\$0	\$0	\$42,000	\$0	\$0	\$42,000
		<i>U.C. per EA</i>					0	0	135000	0	0	135000
HEPA FILTER HOUSING (3W X 3H X DOUBLE PASS)	1.00	EA	0				\$0	\$0	\$135,000	\$0	\$0	\$135,000
Memo: Costs are based on vendor information @ \$15,000/double pasdfilter.												
		<i>U.C. per EA</i>					0	0	25000	0	0	25000
EXHAUST FAN 40 HP (9,000 CFM)	1.00	EA	0				\$0	\$0	\$25,000	\$0	\$0	\$25,000
		<i>U.C. per EA</i>					0	0	6421	0	0	6421
O. A. electric duct heater 400kw	6.00	EA	0				\$0	\$0	\$38,526	\$0	\$0	\$38,526
Memo: Costs are based on RS Means, 2000 (sec. 5761 page 671).												
		<i>U.C. per EA</i>					0	0	136400	0	0	136400
Chiller, water cooled 350 kw	3.00	EA	0				\$0	\$0	\$409,200	\$0	\$0	\$409,200
		<i>U.C. per EA</i>					0	0	4720	0	0	4720
Chilled water pump (160 gpm)	3.00	EA	0				\$0	\$0	\$14,160	\$0	\$0	\$14,160
		<i>U.C. per EA</i>					0	0	7816	0	0	7816
Cooling water pump (420 gpm)	2.00	EA	0				\$0	\$0	\$15,632	\$0	\$0	\$15,632

DETAIL ITEM REPORT

Project Name: **OU 7-70 Staged Interim Action**
Stage III Project-Treatment-Max Treat with TD (Re-escalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
3.2.05.02 CHEM LEACH - BUILDING/PROCESS AREA HVAC												
<i>Memo: Costs for the majority of the HVAC equipment were obtained from the BBWI Engineering group that contacted a local HVAC vendor that provided budgetary cost information based on preliminary design information.</i>												
	Cooling tower (1.3Mw) (assume 600 ton)	<i>U.C. per EA</i>	1.00	EA	0		0	0	20000	0	0	20000
							\$0	\$0	\$20,000	\$0	\$0	\$20,000
Subtotal							\$0	\$0	\$3,476,518	\$0	\$0	\$3,476,518
Sales Tax							\$0	\$0	\$208,591	\$0	\$0	\$208,591
INEEUSubcontractorOverheads							\$0	\$0	\$0	\$0	\$0	\$0
Subtotal Estimate												\$3,685,109
Escalation							\$0	\$0	\$492,331	\$0	\$0	\$492,331
Contingency							\$0	\$0	\$2,558,890	\$0	\$0	\$2,558,890
—Total 3.2.05.02 CHEM LEACH - BUILDING/PROCESS AREA HVAC					0		\$0	\$0	\$6,736,329	\$0	\$0	\$6,736,329

3.2.05.03 CHEM LEACH - INCINERATION EQUIPMENT

Pencil Tank	<i>U.C. per EA</i>	6.00	EA	0		0	0	3000	0	0	3000
						\$0	\$0	\$18,000	\$0	\$0	\$18,000
Plug Valve	<i>U.C. per EA</i>	1.00	EA	0		0	0	25111	0	0	25111
						\$0	\$0	\$25,111	\$0	\$0	\$25,111
Transport Fines From Pencil Tanks to Incinerator	<i>U.C. per EA</i>	1.00	EA	0		0	0	6807	0	0	6807
						\$0	\$0	\$6,807	\$0	\$0	\$6,807
Holding Bin	<i>U.C. per EA</i>	1.00	EA	0		0	0	45713	0	0	45713
						\$0	\$0	\$45,713	\$0	\$0	\$45,713
Metering Feed Valve	<i>U.C. per EA</i>	1.00	EA	0		0	0	27550	0	0	27550
						\$0	\$0	\$27,550	\$0	\$0	\$27,550
Propane Storage Tank	<i>U.C. per EA</i>	1.00	EA	0		0	0	33047	0	0	33047
						\$0	\$0	\$33,047	\$0	\$0	\$33,047
Propane Vaporizer	<i>U.C. per EA</i>	1.00	EA	0		0	0	9360	0	0	9360
						\$0	\$0	\$9,360	\$0	\$0	\$9,360

DETAIL ITEM REPORT

Project **Name:** *OU 7-70 Staged Interim Action*
Stage III Project-Treatment- Max Treat with TD (Re-escalated)
 Project **Location:** *INEEL-RWMC*
Estimate Number: *5974-2 (4a+3aP)*

Client: *S. L. Austad*
Prepared By: *R. D. Adams / S. N. Wasley*
Estimate Type: *Project Support*

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>EquipDment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
3.2.05.03 CHEM LEACH • INCINERATION EQUIPMENT												
	INCINERATOR UNIT, COMPLETE		1.00	EA	0		\$0	\$0	2302900	\$0	\$0	2302900
Memo. Cost for this incinerator includes all of the following components; primary combustor, Primary Burner System, air heater, combustion air blower, open/closed valve, metering feed valve, secondary combustor, combustion air blower, incinerator discharge equipment, incinerator ash cooling equipment, incinerator instruments/controls, cyclone separator/filter, off gas scrubber, ejector venturi scrubber, scrubber heat exchanger, caustic storage tank, caustic pump, high efficiency mist eliminator, off gas stack blower, off gas stack, and Continuous Emissions Monitoring.												
	Drum Loading Glovebox		1.00	EA	0		\$0	\$0	360000	\$0	\$0	360000
	Bridge Crane		1.00	EA	0		\$0	\$0	127788	\$0	\$0	127788
	Monorail		1.00	EA	0		\$0	\$0	21700	\$0	\$0	21700
Subtotal							\$0	\$0	\$2,977,976	\$0	\$0	\$2,977,976
Sales Tax							\$0	\$0	\$178,679	\$0	\$0	\$178,679
INEEUSubcontractorOverheads							\$0	\$0	\$0	\$0	\$0	\$0
Subtotal Estimate												\$3,156,655
Escalation							\$0	\$0	\$421,729	\$0	\$0	\$421,729
Contingency							\$0	\$0	\$2,191,938	\$0	\$0	\$2,191,938
— Total 3.2.05.03 CHEM LEACH • INCINERATION EQUIPMENT					0		\$0	\$0	\$5,770,322	\$0	\$0	\$5,770,322

3.2.05.04 CHEM LEACH • INCINERATION OFF-GAS TREATMENT EQUIP. LOW NOX

	Actuated Valve		1.00	EA	0		\$0	\$0	6296	\$0	\$0	6296
	Scrubber Recirculation Pump		2.00	EA	0		\$0	\$0	3256	\$0	\$0	3256
	Blowdown Pump		2.00	EA	0		\$0	\$0	2175	\$0	\$0	2175

DETAIL ITEM REPORT

Project Name: **OU 7-10 Staged Interim Action**
Stage III Project-Treatment-Max Treatwith TD (Re-escalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs.</u>	<u>Resource</u>	<u>Labor</u>	<u>EquipDment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
3.2.05.04 CHEM LEACH- INCINERATION OFF-GAS TREATMENT EQUIP. LOW NOX												
	Blowdown Tank	<i>U.C. per EA</i>	1.00	EA	0		0 \$0	0 \$0	7314 \$7,314	0 \$0	0 \$0	7314 \$7,314
	Blowdown Tank Mixer	<i>U.C. per EA</i>	1.00	EA	0		0 \$0	0 \$0	11179 \$11,179	0 \$0	0 \$0	11179 \$11,179
	Blowdown Evaporator	<i>U.C. per EA</i>	1.00	EA	0		0 \$0	0 \$0	628984 \$628,984	0 \$0	0 \$0	628984 \$628,984
	Brine Pump	<i>U.C. per EA</i>	2.00	EA	0		0 \$0	0 \$0	3256 \$6,512	0 \$0	0 \$0	3256 \$6,512
	Brine Storage Tank	<i>U.C. per EA</i>	1.00	EA	0		0 \$0	0 \$0	4519 \$4,519	0 \$0	0 \$0	4519 \$4,519
	Brine Transfer Pump	<i>U.C. per EA</i>	2.00	EA	0		0 \$0	0 \$0	1903 \$3,806	0 \$0	0 \$0	1903 \$3,806
	Actuated Valve	<i>U.C. per EA</i>	1.00	EA	0		0 \$0	0 \$0	6296 \$6,296	0 \$0	0 \$0	6296 \$6,296
	Storage Hopper	<i>U.C. per EA</i>	1.00	EA	0		0 \$0	0 \$0	12656 \$12,656	0 \$0	0 \$0	12656 \$12,656
	Star Valve	<i>U.C. per EA</i>	1.00	EA	0		0 \$0	0 \$0	22552 \$22,552	0 \$0	0 \$0	22552 \$22,552
	In-drum Mixer	<i>U.C. per EA</i>	1.00	EA	0		0 \$0	0 \$0	243800 \$243,800	0 \$0	0 \$0	243800 \$243,800
	Enclosure for in Drum Grouting	<i>U.C. per EA</i>	1.00	EA	0		0 \$0	0 \$0	280000 \$280,000	0 \$0	0 \$0	280000 \$280,000
	Exhaust gas heater	<i>U.C. per EA</i>	6.00	EA	0		0 \$0	0 \$0	13333 \$79,998	0 \$0	0 \$0	13333 \$79,998
	HEPA Filter	<i>U.C. per EA</i>	1.00	EA	0		0 \$0	0 \$0	240000 \$240,000	0 \$0	0 \$0	240000 \$240,000

DETAIL ITEM REPORT

Project Name: **OU 7-70 Staged Interim Action**
Stage III Project-Treatment-Max Treat with TD (Reescalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
<u>3.2.05.04 CHEM LEACH - INCINERATION OFF-GAS TREATMENT EQUIP. LOW NOX</u>												
	GAC Adsorber	<i>U.C. per EA</i>	1.00	EA	0		0	0	9000	0	0	9000
							\$0	\$0	\$9,000	\$0	\$0	\$9,000
	Nitrogen Tank	<i>U.C. per EA</i>	1.00	EA	0		0	0	4406	0	0	4406
							\$0	\$0	\$4,406	\$0	\$0	\$4,406
	SCR Blower	<i>U.C. per EA</i>	1.00	EA	0		0	0	150000	0	0	150000
							\$0	\$0	\$150,000	\$0	\$0	\$150,000
	Stack Blower	<i>U.C. per EA</i>	1.00	EA	0		0	0	150000	0	0	150000
							\$0	\$0	\$150,000	\$0	\$0	\$150,000
	HEPA Filter	<i>U.C. per EA</i>	1.00	EA	0		0	0	585000	0	0	585000
							\$0	\$0	\$585,000	\$0	\$0	\$585,000
	Bridge Crane	<i>U.C. per EA</i>	1.00	EA	0		0	0	99495	0	0	99495
							\$0	\$0	\$99,495	\$0	\$0	\$99,495
Subtotal							\$0	\$0	\$2,562,675	\$0	\$0	\$2,562,675
Sales Tax							\$0	\$0	\$153,761	\$0	\$0	\$153,761
INEEUSubcontractorOverheads							\$0	\$0	\$0	\$0	\$0	\$0
Subtotal Estimate												\$2,716,436
Escalation							\$0	\$0	\$362,916	\$0	\$0	\$362,916
Contingency							\$0	\$0	\$1,886,256	\$0	\$0	\$1,886,256
—Total 3.2.05.04 CHEM LEACH - INCINERATION OFF-GAS TREATMENT EQUIP. LOW NOX					0		\$0	\$0	\$4,965,607	\$0	\$0	\$4,965,607

3.2.05.05 CHEM LEACH - OFF-GAS TREATMENT. HIGH NOX

	2b OFF-GAS SYSTEM, COMPLETE	<i>U.C. per EA</i>	1.00	EA	0		0	0	1058071	0	0	1058071
							\$0	\$0	\$1,058,071	\$0	\$0	\$1,058,071
Memo: Cost for this off-gas system includes all of the following components; cyclone separator/ filter, off gas filtration, scrubber heat exchanger NOx reduction section, integraa quench section, reoxidation section, and off-gas qench.												

DETAIL ITEM REPORT

Project Name: **OU 7-10 Staged Interim Action**
Stage III Project-Treatment-Max Treat with TD (Re-escalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
3.2.05.05 CHEM LEACH - OFF-GAS TREATMENT, HIGH NOX												
	Subtotal						\$0	\$0	\$1,058,071	\$0	\$0	\$1,058,071
	Sales Tax						\$0	\$0	\$63,484	\$0	\$0	\$63,484
	INEEU Subcontractor Overheads	0.00%					\$0	\$0	\$0	\$0	\$0	\$0
	Subtotal Estimate											\$1,121,555
	Escalation						\$0	\$0	\$149,840	\$0	\$0	\$149,840
	Contingency						\$0	\$0	\$778,793	\$0	\$0	\$778,793
--Total 3.2.05.05 CHEM LEACH - OFF-GAS TREATMENT, HIGH NOX						0	\$0	\$0	\$2,050,188	\$0	\$0	\$2,050,188

3.2.05.06 CHEM LEACH - THERMAL DESORPTION, SOIL <100 nCi

	Wet Soil Feed Hopper	<i>U.C. per</i>	1.00	0	0	0	\$0	\$0	45713	0	0	45713
									\$45,713	\$0	\$0	\$45,713
	Metering feed valve	<i>U.C. per</i>	1.00	0	0	0	\$0	\$0	22552	0	0	22552
									\$22,552	\$0	\$0	\$22,552
	Rotary Screw Auger	<i>U.C. per</i>	1.00	0	0	0	\$0	\$0	8388	0	0	8388
									\$8,388	\$0	\$0	\$8,388
	Thermal Desorber	<i>U.C. per</i>	1.00	0	0	0	\$0	\$0	241104	0	0	241104
	Memo: 7/2/03 quote from UNISCO Services, Inc.								\$241,104	\$0	\$0	\$241,104
	Container Unloading Glovebox	<i>U.C. per</i>	1.00	0	0	0	\$0	\$0	120000	0	0	120000
									\$120,000	\$0	\$0	\$120,000
	Slide Isolation Valve	<i>U.C. per</i>	1.00	0	0	0	\$0	\$0	16386	0	0	16386
									\$16,386	\$0	\$0	\$16,386
	Cooling Screw Auger	<i>U.C. per</i>	1.00	0	0	0	\$0	\$0	135000	0	0	135000
	Memo: 7/2/03 quote from UNISCO Services, Inc.								\$135,000	\$0	\$0	\$135,000
	Feed Auger	<i>U.C. per</i>	1.00	0	0	0	\$0	\$0	8388	0	0	8388
									\$8,388	\$0	\$0	\$8,388

DETAIL ITEM REPORT

Project Name: **OU 7-10 Staged Interim Action**
Stage III Project-Treatment-Max Treat with TD (Re-escalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
3.2.05.06 CHEM LEACH-THERMAL DESORPTION. SOIL <100 nCi												
	Dry Soil Feed Hopper	<i>U.C. per</i>	1.00		0		0	0	22597	0	0	22597
							\$0	\$0	\$22,597	\$0	\$0	\$22,597
	Rotary Screw Auger	<i>U.C. per</i>	1.00		0		0	0	8388	0	0	8388
							\$0	\$0	\$8,388	\$0	\$0	\$8,388
	Packaging Glovebox	<i>U.C. per</i>	1.00		0		0	0	480000	0	0	480000
							\$0	\$0	\$480,000	\$0	\$0	\$480,000
	Bridge Crane	<i>U.C. per</i>	1.00		0		0	0	99495	0	0	99495
							\$0	\$0	\$99,495	\$0	\$0	\$99,495
	Monorail	<i>U.C. per</i>	1.00		0		0	0	21700	0	0	21700
							\$0	\$0	\$21,700	\$0	\$0	\$21,700
	""WATER AND VOC COLLECTION & PROCESS""	<i>U.C. per</i>	1.00		0		0	0	0.01	0	0	0.01
							\$0	\$0	\$0	\$0	\$0	\$0
	Tube and Shell Condenser	<i>U.C. per</i>	1.00		0		0	0	31085	0	0	31085
							\$0	\$0	\$31,085	\$0	\$0	\$31,085
	Carbon Bed	<i>U.C. per</i>	2.00		0		0	0	3637	0	0	3637
							\$0	\$0	\$7,274	\$0	\$0	\$7,274
	Off Gas Filter	<i>U.C. per</i>	1.00		0		0	0	15000	0	0	15000
							\$0	\$0	\$15,000	\$0	\$0	\$15,000
	Isolation Valve (Sol.)	<i>U.C. per</i>	1.00		0		0	0	4224	0	0	4224
							\$0	\$0	\$4,224	\$0	\$0	\$4,224
	Water Pump	<i>U.C. per</i>	2.00		0		0	0	4000	0	0	4000
							\$0	\$0	\$8,000	\$0	\$0	\$8,000
	Organic Separator	<i>U.C. per</i>	1.00		0		0	0	34742	0	0	34742
							\$0	\$0	\$34,742	\$0	\$0	\$34,742
	VOC Pump	<i>U.C. per</i>	2.00		0		0	0	2200	0	0	2200
							\$0	\$0	\$4,400	\$0	\$0	\$4,400

DETAIL ITEM REPORT

Project Name: **OU 7-70 Staged Interim Action**
Stage III Project-Treatment- Max Treat with TD (Re-escalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
3.2.05.06 CHEM LEACH -THERMAL DESORPTION.SOIL <100 nCi												
	Water Pump	<i>U.C. per</i>	2.00		0		0 \$0	0 \$0	2500 \$5,000	0 \$0	0 \$0	2500 \$5,000
	VOC Storage	<i>U.C. per</i>	1.00		0		0 \$0	0 \$0	3689 \$3,689	0 \$0	0 \$0	3689 \$3,689
	VOC Transfer Pump	<i>U.C. per</i>	2.00		0		0 \$0	0 \$0	2200 \$4,400	0 \$0	0 \$0	2200 \$4,400
	Oil absorber	<i>U.C. per</i>	1.00		0		0 \$0	0 \$0	500 \$500	0 \$0	0 \$0	500 \$500
	Carbon Bed	<i>U.C. per</i>	1.00		0		0 \$0	0 \$0	3637 \$3,637	0 \$0	0 \$0	3637 \$3,637
	Carbon Bed	<i>U.C. per</i>	1.00		0		0 \$0	0 \$0	3637 \$3,637	0 \$0	0 \$0	3637 \$3,637
	Carbon Bed	<i>U.C. par</i>	1.00		0		0 \$0	0 \$0	3637 \$3,637	0 \$0	0 \$0	3637 \$3,637
	Carbon Bed	<i>U.C. per</i>	1.00		0		0 \$0	0 \$0	3637 \$3,637	0 \$0	0 \$0	3637 \$3,637
	Water Evaporator	<i>U.C. per</i>	1.00		0		0 \$0	0 \$0	355358 \$355,358	0 \$0	0 \$0	355358 \$355,358

DETAIL ITEM REPORT

Project Name: **OU 7-10 Staged Interim Action**
Stage III Project-Treatment-Max Treat with TD (Re-escalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
3.2.05.06 CHEM LEACH - THERMAL DESORPTION. SOIL <100 nCi												
	Assist Evaporator	<i>U.C. per</i>	1.00		0		0	0	70529	0	0	70529
							\$0	\$0	\$70,529	\$0	\$0	\$70,529
Subtotal							\$0	\$0	\$1,788,460	\$0	\$0	\$1,788,460
Sales Tax							\$0	\$0	\$107,308	\$0	\$0	\$107,308
INEEL/Subcontractor Overheads							\$0	\$0	\$0	\$0	\$0	\$0
Subtotal Estimate							\$0	\$0	\$253,275	\$0	\$0	\$1,895,768
Escalation							\$0	\$0	\$1,316,395	\$0	\$0	\$253,275
Contingency							\$0	\$0	\$0	\$0	\$0	\$1,316,395
— Total 3.2.05.06 CHEM LEACH - THERMAL DESORPTION, SOIL <100 nCi					0		\$0	\$0	\$3,465,437	\$0	\$0	\$3,465,437

3.2.05.07 CHEM LEACH-THERMAL DESORTION. SOIL >100 nCi

	Rotary Screw Auger	<i>U.C. per EA</i>	1.00	EA	0		0	0	8388	0	0	8388
							\$0	\$0	\$0,388	\$0	\$0	\$8,388
	Wet Soil Feed Hopper	<i>U.C. per EA</i>	1.00	EA	0		0	0	45713	0	0	45713
							\$0	\$0	\$45,713	\$0	\$0	\$45,713
	Metering feed valve	<i>U.C. per EA</i>	1.00	EA	0		0	0	22552	0	0	22552
							\$0	\$0	\$22,552	\$0	\$0	\$22,552
	Thermal Desorber	<i>U.C. per EA</i>	1.00	EA	0		0	0	241104	0	0	241104
	Memo: 7/2/03 quote from UNISCO Services, Inc.						\$0	\$0	\$241,104	\$0	\$0	\$241,104
	Container unloading Glovebox	<i>U.C. per EA</i>	1.00	EA	0		0	0	120000	0	0	120000
							\$0	\$0	\$120,000	\$0	\$0	\$120,000
	Double Dump Valve	<i>U.C. per EA</i>	1.00	EA	0		0	0	27550	0	0	27550
							\$0	\$0	\$27,550	\$0	\$0	\$27,550
	Dry Soil Feed Hopper	<i>U.C. per EA</i>	1.00	EA	0		0	0	22597	0	0	22597
							\$0	\$0	\$22,597	\$0	\$0	\$22,597

DETAIL ITEM REPORT

Project Name: **OU 7-70 Staged Interim Action**
Stage III Project-Treatment- Max Treat with TD (Re-escalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
3.2.05.07 CHEM LEACH-THERMAL DESORTION.SOIL>100 nCi												
	Bridge Crane	<i>U.C.per EA</i>	1.00	EA	0		0	0	99495	0	0	99495
							\$0	\$0	\$99,495	\$0	\$0	\$99,495
	Monorail	<i>U.C. per EA</i>	1.00	EA	0		0	0	21700	0	0	21700
							\$0	\$0	\$21,700	\$0	\$0	\$21,700
	'""WATER AND VOC COLLECTION& PROCESS'	<i>U.C. per</i>	1.00		0		0	0	0.01	0	0	0.01
							\$0	\$0	\$0	\$0	\$0	\$0
	Tube and Shell Condenser	<i>U.C. per EA</i>	1.00	EA	0		0	0	31085	0	0	31085
							\$0	\$0	\$31,085	\$0	\$0	\$31,085
	Isolation Valve (Sol.)	<i>U.C. per EA</i>	1.00	EA	0		0	0	4224	0	0	4224
							\$0	\$0	\$4,224	\$0	\$0	\$4,224
	Water Pump	<i>U.C.per EA</i>	1.00	EA	0		0	0	4000	0	0	4000
							\$0	\$0	\$4,000	\$0	\$0	\$4,000
	Organic Separator	<i>U.C.per EA</i>	1.00	EA	0		0	0	34742	0	0	34742
							\$0	\$0	\$34,742	\$0	\$0	\$34,742
	VOC Pump	<i>U.C.per EA</i>	1.00	EA	0		0	0	2200	0	0	2200
							\$0	\$0	\$2,200	\$0	\$0	\$2,200
	Water Pump	<i>U.C. per EA</i>	1.00	EA	0		0	0	2500	0	0	2500
							\$0	\$0	\$2,500	\$0	\$0	\$2,500
	VOC Storage	<i>U.C. per EA</i>	1.00	EA	0		0	0	3689	0	0	3689
							\$0	\$0	\$3,689	\$0	\$0	\$3,689
	VOC Transfer Pump	<i>U.C. per EA</i>	1.00	EA	0		0	0	2200	0	0	2200
							\$0	\$0	\$2,200	\$0	\$0	\$2,200
	Oil absorber	<i>U.C. per EA</i>	1.00	EA	0		0	0	500	0	0	500
							\$0	\$0	\$500	\$0	\$0	\$500
	Carbon Bed	<i>U.C.per EA</i>	1.00	EA	0		0	0	3637	0	0	3637
							\$0	\$0	\$3,637	\$0	\$0	\$3,637

DETAIL ITEM REPORT

Project Name: *OU 7-10 Staged Interim Action*
Stage III Project-Treatment-Max Treat with TD (Re-escalated)
 Project Location: *INEEL-RWMC*
 Estimate Number: *5974-2 (4a+3aP)*

Client: *S. L. Austad*
 Prepared By: *R. D. Adams / S. N. Wasley*
 Estimate Type: *Project Support*

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
<u>3.2.05.07 CHEM LEACH-THERMAL DESORTION SOIL >100 nCi</u>												
		<i>U.C. per EA</i>					0	0	3637	0	0	3637
Carbon Bed			1.00	EA	0		\$0	\$0	\$3,637	\$0	\$0	\$3,637
		<i>U.C. per EA</i>					0	0	3637	0	0	3637
Carbon Bed			1.00	EA	0		\$0	\$0	\$3,637	\$0	\$0	\$3,637
		<i>U.C. per EA</i>					0	0	3637	0	0	3637
Carbon Bed			1.00	EA	0		\$0	\$0	\$3,637	\$0	\$0	\$3,637
		<i>U.C. per EA</i>					0	0	7389	0	0	7389
Water Tank			1.00	EA	0		\$0	\$0	\$7,389	\$0	\$0	\$7,389
		<i>U.C. per EA</i>					0	0	4000	0	0	4000
Pump			1.00	EA	0		\$0	\$0	\$4,000	\$0	\$0	\$4,000
		<i>U.C. per EA</i>					0	0	4224	0	0	4224
Flow Control Valve			1.00	EA	0		\$0	\$0	\$4,224	\$0	\$0	\$4,224
		<i>U.C. per EA</i>					0	0	4224	0	0	4224
Isolation Valve (Sol.)			1.00	EA	0		\$0	\$0	\$4,224	\$0	\$0	\$4,224
		<i>U.C. per EA</i>					0	0	4224	0	0	4224
Isolation Valve (Sol.)			1.00	EA	0		\$0	\$0	\$4,224	\$0	\$0	\$4,224
		<i>U.C. per EA</i>					0	0	4224	0	0	4224
Isolation Valve (Sol.)			1.00	EA	0		\$0	\$0	\$4,224	\$0	\$0	\$4,224

DETAIL ITEM REPORT

Project Name: **OU 7-70 Staged Interim Action**
Stage III Project-Treatment-Max Treat with TD (Re-escalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
3.2.05.07 CHEM LEACH- THERMAL DESORTION, SOIL >100 nCi												
	Isolation Valve (Sol.)	<i>U.C. per EA</i>	1.00	EA	0		\$0	\$0	4224 \$4,224	0 \$0	0 \$0	4224 \$4,224
Subtotal							\$0	\$0	\$741,296	\$0	\$0	\$741,296
Sales Tax							\$0	\$0	\$44,478	\$0	\$0	\$44,478
INEEUSubcontractor Overheads							\$0	\$0	\$0	\$0	\$0	\$0
Subtotal Estimate												\$705,774
Escalation							\$0	\$0	\$104,979	\$0	\$0	\$104,979
Continaency							\$0	\$0	\$545,631	\$0	\$0	\$545,631
—Total 3.2.05.07CHEM LEACH-THERMAL DESORTION, SOIL >100 nCi					0		\$0	\$0	\$1,436,384	\$0	\$0	\$1,436,304

3.2.05.08 CHEM LEACH- BUILDINGPROCESSUTILITIES

Water Flow Control Valve	<i>U.C. per EA</i>	1.00	EA	0		\$0	\$0	25111 \$25,111	0 \$0	0 \$0	25111 \$25,111
Steam Boiler	<i>U.C. per EA</i>	1.00	EA	0		\$0	\$0	155854 \$155,854	0 \$0	0 \$0	155854 \$155,854
Flow Control Valve	<i>U.C. per EA</i>	1.00	EA	0		\$0	\$0	4224 \$4,224	0 \$0	0 \$0	4224 \$4,224
Feedwaterpumps	<i>U.C. per EA</i>	2.00	EA	0		\$0	\$0	5300 \$10,600	0 \$0	0 \$0	5300 \$10,600
Water Softener	<i>U.C. per EA</i>	1.00	EA	0		\$0	\$0	4500 \$4,500	0 \$0	0 \$0	4500 \$4,500
Deaerator	<i>U.C. per EA</i>	1.00	EA	0	50	\$0	\$0	21375 \$21,375	0 \$0	0 \$0	21375 \$21,375
Propane Tank	<i>U.C. per EA</i>	3.00	EA	0		\$0	\$0	73140 \$219,420	0 \$0	0 \$0	73140 \$219,420

DETAIL ITEM REPORT

Project Name: **OU 7-10 Staged Interim Action**
Stage III Project-Treatment-Max Treat with TD (Re-escalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
3.2.05.08 CHEM LEACH - BUILDINGPROCESS UTILITIES												
	Propane vaporizer		1.00	EA	0		\$0	\$0	16006	0	0	16006
		<i>U.C. per EA</i>										
	Thermal liquid heater		1.00	EA	0		\$0	\$0	85000	0	0	85000
	Memo: Quote from Parker Boiler. Includes theral oil circulating pump and feed tank.											
	Control Valve		1.00	EA	0		\$0	\$0	5500	0	0	5500
	Memo: Vendor quote provided by engineer											
	Control Valve		2.00	EA	0		\$0	\$0	5500	0	0	5500
	Memo: Vendor quote provided by engineer.											
	Duplex oil filter		1.00	EA	0		\$0	\$0	3000	0	0	3000
	Oil		3,000.00	L	0		\$0	\$0	2.53	0	0	2.53
	Evaporative cooling Tower		1.00	EA	0		\$0	\$0	112772	0	0	112772
	Cooling water pump		3.00	EA	0		\$0	\$0	3809	0	0	3809
	PLANT AIR COMPRESSOR		1.00	EA	0		\$0	\$0	24782	0	0	24782
	PLANT AIR COMPRESSOR TANK		1.00	EA	0		\$0	\$0	2906	0	0	2906

DETAIL ITEM REPORT

Project Name: *OU 7-70 Staged Interim Action*
Stage III Project-Treatment-Max Treat with TD (Re-escalated)
 Project Location: *INEEL-RWMC*
 Estimate Number: *5974-2 (4a+3aP)*

Client: *S. L. Austad*
 Prepared By: *R. D. Adams / S. N. Wasley*
 Estimate Type: *Project Support*

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
3.2.05.08 CHEM LEACH - BUILDINGPROCESS UTILITIES												
	PLANT BREATHING AIR COMPRESSOR & FILTER/DRYER		1.00	EA	0		\$0	\$0	\$53,800	\$0	\$0	\$53,800
									53800			53800
									\$53,800	\$0	\$0	\$53,800
	Subtotal						\$0	\$0	\$774,867	\$0	\$0	\$774,867
	Sales Tax						\$0	\$0	\$46,492	\$0	\$0	\$46,492
	INEEL Subcontractor Overheads	0.00%					\$0	\$0	\$0	\$0	\$0	\$0
	Subtotal Estimate											\$821,359
	Escalation						\$0	\$0	\$109,734	\$0	\$0	\$109,734
	Contingency						\$0	\$0	\$570,341	\$0	\$0	\$570,341
---	Total 3.2.05.08 CHEM LEACH - BUILDINGPROCESS UTILITIES				0		\$0	\$0	\$1,501,433	\$0	\$0	\$1,501,433

3.2.05.09 CHEM LEACH - I&C PROCUREMENT

Memo: *Based in cost information provided by the BBWI Design I&C group, estimate file contains back-up spread sheet identifying how these costs were developed.*

	I&C		1.00	LS	0		\$0	\$0	\$804,350	\$0	\$0	\$804,350
									804350			804350
									\$804,350	\$0	\$0	\$804,350
	Subtotal						\$0	\$0	\$804,350	\$0	\$0	\$804,350
	Sales Tax						\$0	\$0	\$48,261	\$0	\$0	\$48,261
	INEEL/Subcontractor Overheads	0.00%					\$0	\$0	\$0	\$0	\$0	\$0
	Subtotal Estimate											\$852,611
	Escalation						\$0	\$0	\$113,909	\$0	\$0	\$113,909
	Contingency						\$0	\$0	\$592,041	\$0	\$0	\$592,041
---	Total 3.2.05.09 CHEM LEACH - I&C PROCUREMENT				0		\$0	\$0	\$1,558,561	\$0	\$0	\$1,558,561

3.2.06 EQUIPMENT PROCUREMENT (AIRLOCK TO CHARACTERIZATION)

	CCTV MONITORING SYSTEM-EQUIPMENT		4,250.00	SF	0		\$0	\$0	\$25,500	\$0	\$0	\$25,500
									6			6
									\$25,500	\$0	\$0	\$25,500

Memo: This unit cost is based on the GEM project. Assume the same type of equipment and quantities will be required.

DETAIL ITEM REPORT

Project Name: **OU 7-70 Staged Interim Action**
Stage III Project-Treatment-Max Treatwith TD(Re-escalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
3.2.06 EQUIPMENT PROCUREMENT (AIRLOCK TO CHARACTERIZATION)												
	Subtotal								\$25,500	\$0	\$0	\$25,500
	Sales Tax								\$1,530	\$0	\$0	\$1,530
	INEEL Subcontractor Overheads	0.00%							\$0	\$0	\$0	\$0
	Subtotal Estimate											\$27,030
	Escalation						\$0	\$0	\$3,611	\$0	\$0	\$3,611
	Contingency						\$0	\$0	\$18,769	\$0	\$0	\$18,769
--Total 3.2.06 EQUIPMENT PROCUREMENT (AIRLOCK TO CHARACTERIZATION)					0		\$0	\$0	\$49,410	\$0	\$0	\$49,410

3.3 BBWI MATERIAL HANDLING FEE

	PROCUREMENT FEE	<i>U.C. per \$</i> 80,721,113.00	\$	0			0 \$0	0 \$0	0 \$0	0 \$0	0.12 \$9,686,534	0.12 \$9,686,534
	G&A	<i>U.C. per \$</i> 9,686,534.00	\$	0			0 \$0	0 \$0	0 \$0	0 \$0	0.38 \$3,680,883	0.38 \$3,680,883
	Subtotal						\$0	\$0	\$0	\$0	\$13,367,416	\$13,367,416
	Sales Tax						\$0	\$0	\$0	\$0	\$0	\$0
	INEEL/Subcontractor Overheads	0.00%					\$0	\$0	\$0	\$0	\$0	\$0
	Subtotal Estimate						\$0	\$0	\$0	\$0		\$13,367,416
	Escalation						\$0	\$0	\$0	\$0	\$1,785,887	\$1,785,887
	Contingency						\$0	\$0	\$0	\$0	\$9,282,152	\$9,282,152
--Total 3.3 BBWI MATERIAL HANDLING FEE					0		\$0	\$0	\$0	\$0	524,435,455	\$24,435,455

4.1 CONSTRUCTION MANAGEMENT

	CONSTRUCTION MANAGEMENT	<i>U.C. per \$</i> 140,235,135.00	\$	0			0 \$0	0 \$0	0 \$0	0 \$0	0.07 \$9,816,459	0.07 \$9,816,459
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DETAIL ITEM REPORT

Project Name: **OU 7-70 Staged Interim Action**
Stage III Project-Treatment-Max Treat with TD (Re-escalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
4.1 CONSTRUCTIONMANAGEMENT												
	Subtotal						\$0	\$0	\$0	\$0	\$9,816,459	\$9,816,459
	Sales Tax						\$0	\$0	\$0	\$0	\$0	\$0
	INEEL/Subcontractor Overheads	0.00%					\$0	\$0	\$0	\$0	\$0	\$0
	Subtotal Estimate						\$0	\$0	\$0	\$0	\$1,852,366	\$9,816,459
	Escalation						\$0	\$0	\$0	\$0	\$8,382,733	\$1,852,366
	Contingency						\$0	\$0	\$0	\$0	\$0	\$8,382,733
--Total 4.1 CONSTRUCTION MANAGEMENT					0		\$0	\$0	\$0	\$0	\$20,051,559	\$20,051,559

4.2.01.01 WRPF - GENERAL CONDITIONS

	GEN	U.C. per HRS		0.12	\$40.00		4.8	0	0	0	0	4.8
SUPERVISION			234,319.00	HRS	28,118	CN-SUPR	\$1,124,731	\$0	\$0	\$0	\$0	\$1,124,731
Memo: @ 12% of labor hrs.												
	GEN	U.C. per \$					0	0	0	0.006	0	0.006
Mobilization & Demobilization			29,375,518.00	\$	0	CN-SKWK	\$0	\$0	\$0	\$176,253	\$0	\$176,253
Memo: Mobilization/demobilization costs @ .6% of direct construction \$.												
	GEN	U.C. per HRS					0	4	0	0	0	4
CONSTRUCTION EQUIPMENT ALLOWANCE			234,319.00	HRS	0		\$0	\$937,276	\$0	\$0	\$0	\$937,276
Memo: @ \$2.50/LABOR HOUR.												
	GEN	U.C. per \$					0	0	0.04	0	0	0.04
SMALL TOOLS & CONSUMABLES			16,449,645.00	\$	0		\$0	\$0	\$657,986	\$0	\$0	\$657,986
Memo: @ 4% of construction labor \$.												
	GEN	U.C. per HRS			0.08	\$31.58	2.526	0	0	0	0	2.526
GENERAL CLEANUP			234,319.00	HRS	18,746	CN-LABR	\$591,984	\$0	\$0	\$0	\$0	\$591,984
Memo: @ 8% of construction labor hours.												
	GEN	U.C. per HRS			0.05	\$34.52	1.726	0	0	0	0	1.726
CONDUCT OF OPERATIONS/CONDUCT OF MAINTENANCE			234,319.00	HRS	11,716	CN-SKWK	\$404,435	\$0	\$0	\$0	\$0	\$404,435
Memo: @ 5% of labor hours.												
	GEN	U.C. per wks			40	\$70.00	2800	0	0	0	0	2800
QA Manager			107.00	wks	4,280	CN-MGR	\$299,600	\$0	\$0	\$0	\$0	\$299,600

DETAIL ITEM REPORT

Project Name: **OU 7-10 Staged Interim Action**
Stage 111 Project-Treatment- Max Treat with TD (Re-escalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
4.2.01.01WRPF - GENERAL CONDITIONS												
	QA Clerk	GEN		<i>U.C. per wks</i>	<i>40</i>	<i>\$20.00</i>	<i>800</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>800</i>
			107.00	wks	4,280	CN-CLRK	\$85,600	\$0	\$0	\$0	\$0	\$85,600
	QC Inspector (ave 3 inspectors)	GEN		<i>U.C. per wks</i>	<i>120</i>	<i>\$40.00</i>	<i>4800</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>4800</i>
			107.00	wks	12,840	CN-SUPR	\$513,600	\$0	\$0	\$0	\$0	\$513,600
	QA/QC Pickup (1 pickup)	GEN		<i>U.C. per wks</i>	<i>40</i>		<i>0</i>	<i>315.2</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>315.2</i>
			107.00	wks	4,280	00E2060	\$0	\$33,726	\$0	\$0	\$0	\$33,726
	Craning Allowance - W/ Operator & Oiler	GEN		<i>U.C. per Wk</i>	<i>E0</i>	<i>\$34.20</i>	<i>2736</i>	<i>1250</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>3986</i>
			107.00	Wk	8,560	CN-ENGR	\$292,752	\$133,750	\$0	\$0	\$0	\$426,502
	CONSTRUCTIONWAREHOUSE	GEN		<i>U.C. per SF</i>			<i>0</i>	<i>0</i>	<i>0</i>	<i>75</i>	<i>0</i>	<i>75</i>
			15,000.00	SF	0		\$0	\$0	\$0	\$1,125,000	\$0	\$1,125,000
Memo: Based on Means Facility Cost manual adjusted by our Nine-Block Matrix factors assuming a #6 or 7 on the Matrix.												
Subtotal							\$3,312,701	\$1,104,752	\$657,986	\$1,301,253	\$0	\$6,376,693
Sales Tax							\$0	\$0	\$39,479	\$0	\$0	\$39,479
INEEUSubcontractor Overheads							\$961,677	\$320,710	\$202,474	\$377,754	\$0	\$1,862,615
Subtotal Estimate												\$0,270,706
Escalation							\$806,575	\$268,985	\$169,818	\$316,829	\$0	\$1,562,207
Contingency							\$3,650,092	\$1,217,269	\$768,500	\$1,433,782	\$0	\$7,069,643
---Total 4.2.01.01WRPF - GENERAL CONDITIONS					88,540		\$0,731,045	\$2,911,715	\$1,830,257	\$3,429,610	\$0	\$16,910,636

4.2.01.02.01.01 UTILTY & SUPPORT - FIRE PUMP HOUSE

	PRE-ENGINEEREDMETAL BUILDING 30' X 40'			<i>U.C. per sf</i>			<i>0</i>	<i>0</i>	<i>0</i>	<i>143.73</i>	<i>0</i>	<i>743.73</i>
			1,200.00	sf	0		\$0	\$0	\$0	\$172,476	\$0	\$172,476
Memo: Unit costs for this pre-engineeredmetal building is based on historical cost of a facilityerected at the RWMC area in 1996,the RWMC Maintenance Facility. The reflected unit cost includes slab on grade, building structure, mechanical, and electrical. The estimate file contains the historical cost data sheet.												

DETAIL ITEM REPORT

Project Name: **OU 7-10 Staged Interlm Action**
Stage III Project-Treatment-Max Treat with TD (Re-escalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
<u>4.2.01.02.01.01 UTILTY & SUPPORT - FIRE PUMP HOUSE</u>												
	Subtotal							\$0	\$0	\$0	\$172,476	\$172,476
	Sales Tax							\$0	\$0	\$0	\$0	\$0
	INEEUSubcontractorOverheads	0.00%						\$0	\$0	\$0	\$0	\$0
	Subtotal Estimate											5172,476
	Escalation							\$0	\$0	\$32,546	\$0	\$32,546
	Continoency							\$0	\$0	\$147,285	\$0	\$147,285
—Total 4.2.01.02.01.01 UTILTY & SUPPORT - FIRE PUMP HOUSE					0			\$0	\$0	\$352,308	\$0	5352,308
 <u>4.2.01.02.01.02 UTILTY & SUPPORT - POTABLE WATER SYSTEM</u>												
	2" POTABLELINE	PIPE	U.C. per LF					0	0	0	15	15
			1,000.00	LF	0	CN-PIPE		\$0	\$0	\$0	\$15,000	\$15,000
	EXCAVATION FOR LINE	GEN	U.C. per LF					0	0	0	50	50
			1,000.00	LF	0	CN-ENGR		\$0	\$0	\$0	\$50,000	\$50,000
	Subtotal							\$0	\$0	\$0	\$65,000	\$65,000
	Sales Tax							\$0	\$0	\$0	\$0	\$0
	INEEUSubcontractorOverheads	33.43%						\$0	\$0	\$0	\$21,731	\$21,731
	Subtotal Estimate											\$86,731
	Escalation							\$0	\$0	\$0	\$16,366	\$16,366
	Contingency							\$0	\$0	\$0	\$74,063	\$74,063
—Total 4.2.01.02.01.02 UTILTY & SUPPORT - POTABLE WATER SYSTEM					0			\$0	\$0	\$0	\$177,160	\$177,160
 <u>4.2.01.02.01.03 UTILTY & SUPPORT - SANITARY WASTE SYSTEM</u>												
	4" SANITARY WASTE LINE	PIPE	U.C. per LF					0	0	0	40	40
			1,000.00	LF	0	CN-PIPE		\$0	\$0	\$0	\$40,000	\$40,000
	SEWAGE LIFT STATION (ALLOWANCE)	PIPE	U.C. per EA					0	0	0	42500	42500
			1.00	EA	0	CN-PIPE		\$0	\$0	\$0	\$42,500	\$42,500

DETAIL ITEM REPORT

Project Name: **OU 7-10 Staged Interim Action**
Stage III Project-Treatment-Max Treat with TD (Reescalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
<u>4.2.01.02.01.03 UTILTIY & SUPPORT - SANITARY WASTE SYSTEM</u>												
	ELECTRICAL ALLOWANCE	ELEC <i>U.C. per LS</i>	1.00	LS	0	CN-ELEC	\$0	\$0	\$0	10000 \$10,000	0 \$0	10000 \$10,000
	EXCAVATION FOR LINE	GEN <i>U.C. per LF</i>	1,000.00	LF	0	CN-ENGR	\$0	\$0	\$0	50 \$50,000	0 \$0	50 \$50,000
Subtotal							\$0	\$0	\$0	\$142,500	\$0	\$142,500
Sales Tax							\$0	\$0	\$0	\$0	\$0	\$0
INEEL/Subcontractor Overheads							\$0	\$0	\$0	\$59,011	\$0	\$59,011
Subtotal Estimate												\$201,511
Escalation							\$0	\$0	\$0	\$38,025	\$0	\$38,025
Contingency							\$0	\$0	\$0	\$172,080	\$0	\$172,080
—Total 4.2.01.02.01.03 UTILTIY & SUPPORT - SANITARY WASTE SYSTEM					0		\$0	\$0	\$0	\$411,616	\$0	\$411,616

4.2.01.02.01.04 UTILTIY & SUPPORT - FIRE PIPING SYSTEM

	FIRE PUMPS	FP <i>U.C. per EA</i>	2.00	EA	0	CN-SPRI	\$0	\$0	\$0	64500 \$129,000	0 \$0	64500 \$129,000
	MISC VALVING, EQUIPMENT, & CONTROLS	FP <i>U.C. per LS</i>	1.00	LS	0	CN-SPRI	\$0	\$0	\$0	38500 \$38,500	0 \$0	38500 \$38,500
Memo: Allowance @ 30% of pump costs.												
	4" FIRE MAIN	FP <i>U.C. per LF</i>	1,000.00	LF	0	CN-SPRI	\$0	\$0	\$0	50 \$50,000	0 \$0	50 \$50,000
Memo: Based on a detailed take off of pipe, PIV's, hydrants, thrust blocks, coat & wrap, jumpers testing, etc.												
	6" FIRE MAIN-LOOP	FP <i>U.C. per LF</i>	3,000.00	LF	0	CN-SPRI	\$0	\$0	\$0	65.3 \$195,900	0 \$0	65.3 \$195,900
Memo: Based on a detailed take off of pipe, PIV's, hydrants, thrust blocks. coat & wrap, jumpers testing, etc.												
	WATER STORAGE TANK 40' DIA X 40' HIGH	FP <i>U.C. per EA</i>	1.00	EA	0	CN-SPRI	\$0	\$0	\$0	130000 \$130,000	0 \$0	130000 \$130,000
Memo: Costs are based on Richardsons 2000 API Cone Roof Storage tank sec. 100-370 page 3.												

DETAIL ITEM REPORT

Project Name: **OU 7-10 Staged Interim Action**
Stage III Project-Treatment- Max Treat with TD (Re-escalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
<u>4.2.01.02.01.04 UTILTY & SUPPORT - FIRE PIPING SYSTEM</u>												
	TANK INSULATION	INSUL	<i>U.C. per SF</i>									
			6,284.00	SF	0	CN-ASBE	\$0	\$0	\$0	14.7	\$0	14.7
							\$0	\$0	\$0	\$92,375	\$0	\$92,375
	TANK FOUNDATION	GEN	<i>U.C. per LS</i>									
			1.00	LS	0	CN-ENGR	\$0	\$0	\$0	40000	\$0	40000
							\$0	\$0	\$0	\$40,000	\$0	\$40,000
	Memo: Allowance @ 30% of tank cost											
	EXCAVATION FOR LINE	GEN	<i>U.C. per LF</i>									
			4,000.00	LF	0	CN-ENGR	\$0	\$0	\$0	50	\$0	50
							\$0	\$0	\$0	\$200,000	\$0	\$200,000
Subtotal							\$0	\$0	\$0	\$875,775	\$0	\$875,775
Sales Tax							\$0	\$0	\$0	\$0	\$0	\$0
INEEUSubcontractorOverheads							\$0	\$0	\$0	\$336,271	\$0	\$336,271
Subtotal Estimate							\$0	\$0	\$0	\$228,713	\$0	\$1,212,046
Escalation							\$0	\$0	\$0	\$1,035,023	\$0	\$228,713
Contingency							\$0	\$0	\$0	\$1,035,023	\$0	\$1,035,023
—Total 4.2.01.02.01.04 UTILTY & SUPPORT - FIRE PIPING SYSTEM					0		\$0	\$0	\$0	\$2,475,702	\$0	\$2,475,782

4.2.01.02.01.05.2 SITEWORK

	Excavate for Concrete Pad	DIRT	<i>U.C. per CY</i>		0.39	\$34.75	13.553	1.27	0	0	0	14.823
			44.00	CY	17	CN-EQMD	\$596	\$56	\$0	\$0	\$0	\$652
	12" of Pitrun for Equipment Pad	DIRT	<i>U.C. per CY</i>		0.032	\$34.75	1.098	0.711	8	0	0	9.809
			33.00	CY	1	CN-EQMD	\$36	\$23	\$264	\$0	\$0	\$324
	4" of Compacted Crushed Gravel	DIRT	<i>U.C. per CY</i>		1.09	\$34.75	37.877	30	27	0	0	94.877
			11.00	CY	12	CN-EQMD	\$417	\$330	\$297	\$0	\$0	\$1,044

DETAIL ITEM REPORT

Project Name: **OU 7-10 Staged Interlm Action**
Stage III Project-Treatment-Max Treat with TD (Reescalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
4.2.01.02.01.05.2 SITEWORK												
	Surveyors	DIRT			20	\$33.17	663.4	0	0	0	0	663.4
			1.00	Day	20	CN-SURV	\$663	\$0	\$0	\$0	\$0	\$663
							\$1,713	\$409	\$561	\$0	\$0	\$2,683
Subtotal							\$0	\$0	\$34	\$0	\$0	\$34
Sales Tax							\$718	\$172	\$249	\$0	\$0	\$1,139
INEEL/Subcontractor Overheads							41.93%					
Subtotal Estimate												\$3,856
Escalation							\$459	\$110	\$159	\$0	\$0	\$728
Contingency							\$2,076	\$496	\$721	\$0	\$0	\$3,293
—Total 4.2.01.02.01.05.2 SITEWORK					50		\$4,965	\$1,107	\$1,724	\$0	\$0	\$7,876

4.2.01.02.01.05.3 CONCRETE

	Form & Strip 8" Concrete Pad	CONC			0.07	\$35.81	2.507	0	0.22	0	0	2.727
			240.00	LF	17	CN-CARP	\$602	\$0	\$53	\$0	\$0	\$654
							\$0	\$0	\$1,200	\$0	\$0	\$1,200
Tie Rebar For Transformer Pad							\$2,865	\$0	\$1,200	\$0	\$0	\$4,065
	Place & Finish Concrete For Transformer Pad	CONC			0.591	\$33.08	19.55	0	85	0	0	104.55
			40.00	CY	24	CN-CONC	\$782	\$0	\$3,400	\$0	\$0	\$4,182

DETAIL ITEM REPORT

Project Name: **OU 7-70 Staged Interim Action**
Stage III Project-Treatment-Max Treat with TD (Re-escalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
<u>4.2.01.02.01.05.1 CONCRETE</u>												
	CONC	U.C. per ea			2	\$31.58	63.16	0	130	0	0	193.16
	Install Guard Post around Transformer Pad		48.00	ea	96	CN-LABR	\$3,032	\$0	\$6,240	\$0	\$0	\$9,272
Subtotal							\$7,280	\$0	\$10,893	\$0	\$0	\$18,173
Sales Tax							\$0	\$0	\$654	\$0	\$0	\$654
INEEUSubcontractor Overheads							\$3,053	\$0	\$4,842	\$0	\$0	\$7,895
Subtotal Estimate												\$26,721
Escalation							\$1,950	\$0	\$3,092	\$0	\$0	\$5,042
Contingency							\$8,824	\$0	\$13,995	\$0	\$0	\$22,818
—Total 4.2.01.02.01.05.1 CONCRETE					216		\$21,106	\$0	\$33,475	\$0	\$0	\$54,582

4.2.01.02.01.05.4.1 SWITCHGEAR

	ELEC	U.C. per Ea			160	\$35.89	5742.4	5000	382000	0	0	392742.4
	2000 AMP NEMA 3R WALK-IN 5 kV DOUBLE ENDED SWITCHGEAR		1.00	Ea	160	CN-ELEC	\$5,742	\$5,000	\$382,000	\$0	\$0	\$392,742
Memo: Cost for switchgear is factored from INTEC, EUSU, Sub 60 costs in 1997. This gear was 3000 amp Nema 1. This estimate assumes 14% escalation on \$375,000= \$427,500. Then factors to 66% because of the 2000 amp bus rating of this gear. The estimate adds \$100,00 to the estimate for the Nema 3R enclosure.												
Subtotal							\$5,742	\$5,000	\$382,000	\$0	\$0	\$392,742
Sales Tax							\$0	\$0	\$22,920	\$0	\$0	\$22,920
INEEUSubcontractor Overheads							\$2,762	\$2,405	\$194,783	\$0	\$0	\$199,950
Subtotal Estimate												\$615,613
Escalation							\$1,605	\$1,397	\$113,164	\$0	\$0	\$116,166
Contingency							\$7,263	\$6,324	\$512,114	\$0	\$0	\$525,700
—Total 4.2.01.02.01.05.4.1 SWITCHGEAR					160		\$17,372	\$15,126	\$1,224,981	\$0	\$0	\$1,257,479

4.2.01.02.01.05.4.2 TRANSFORMERS

	ELEC	U.C. per Ea			80	\$35.89	2871.2	5000	37700	0	0	45571.2
	2000 kVA 4160-277/480 DRY TRANSFORMER		1.00	Ea	80	CN-ELEC	\$2,871	\$5,000	\$37,700	\$0	\$0	\$45,571

DETAIL ITEM REPORT

Project Name: **OU 7-10 Staged Interim Action**
Stage III Project-Treatment- Max Treat with TD (Re-escalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
<u>4.2.01.02.01.05.4.2 TRANSFORMERS</u>												
	ELEC	U.C. per Ea			60	\$35.89	2153.4	5000	33200	0	0	40353.4
	1500kVA 4160-277/480 DRY TRANSFORMER		1.00	Ea	60	CN-ELEC	\$2,153	\$5,000	\$33,200	\$0	\$0	\$40,353
Memo: Transformer and labor costs are based on R. S. Means.												
	ELEC	U.C. per Ea			80	\$35.89	2871.2	5000	42400	0	0	50271.2
	2500 kVA 4160-277/480 DRY TRANSFORMER		2.00	Ea	160	CN-ELEC	\$5,742	\$10,000	\$84,800	\$0	\$0	\$100,542
<hr/>												
	Subtotal						\$10,767	\$20,000	\$155,700	\$0	\$0	\$186,467
	Sales Tax						\$0	\$0	\$9,342	\$0	\$0	\$9,342
	INEEL/Subcontractor Overheads	48.10%					\$5,179	\$9,621	\$79,392	\$0	\$0	\$94,192
<hr/>												
	Subtotal Estimate											\$290,001
	Escalation						\$3,009	\$5,589	\$46,125	\$0	\$0	\$54,723
	Contingency						\$13,617	\$25,295	\$208,733	\$0	\$0	\$247,645
<hr/>												
--Total 4.2.01.02.01 .05.4.2 TRANSFORMERS					300		\$32,573	\$60,505	\$499,292	\$0	\$0	\$592,370
<hr/>												
<u>4.2.01.02.01.05.4.3 STANDBY GENERATOR</u>												
	ELEC	U.C. per Ea			120	\$35.89	4306.8	5000	233000	0	0	242306.8
	1000kW DIESEL GENERATOR		1.00	Ea	120	CN-ELEC	\$4,307	\$5,000	\$233,000	\$0	\$0	\$242,307
Memo. Pricing is based on a verbal ROM quote from Western States Equipment in Boise, 6/30/03. Price includes louvers, day tank, and maint fuel tank.												
<hr/>												
	Subtotal						\$4,307	\$5,000	\$233,000	\$0	\$0	\$242,307
	Sales Tax						\$0	\$0	\$13,980	\$0	\$0	\$13,980
	INEEU Subcontractor Overheads	48.10%					\$2,072	\$2,405	\$118,807	\$0	\$0	\$123,284
<hr/>												
	Subtotal Estimate											\$379,571
	Escalation						\$1,204	\$1,397	\$69,024	\$0	\$0	\$71,625
	Contingency						\$5,447	\$6,324	\$312,363	\$0	\$0	\$324,133
<hr/>												
--Total 4.2.01.02.01.05.4.3 STANDBY GENERATOR					120		\$13,029	\$15,126	\$747,174	\$0	\$0	\$775,329

DETAIL ITEM REPORT

Project Name: **OU 7-10 Staged Interim Action**
Stage III Project-Treatment- Max Treat with TD (Re-escalated)
Project Location: **INEEL-RWMC**
Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
Prepared By: **R. D. Adams / S. N. Wasley**
Estimate Type: **Project Support**

Code	Description	Contractor	Qty	UOM	Hrs	Resource	Labor	Equipment	Material	Subcontractor	Other	TOTAL
<u>4.2.01.02.01.05.4.4 CONDUCTORS AND GROUNDING</u>												
	ELEC	<i>U.C. per Lf</i>			<i>0.07</i>	<i>\$35.89</i>	<i>2.512</i>	<i>0</i>	<i>4.5</i>	<i>0</i>	<i>0</i>	<i>7.012</i>
	500 MCM 5 kV POWER CABLE, ASSUME 6 PER PHASE, 200 LF run		3,600.00	Lf	252	CN-ELEC	\$9,044	\$0	\$16,200	\$0	\$0	\$25,244
	ELEC	<i>U.C. per Lf</i>			<i>0.03</i>	<i>\$35.89</i>	<i>1.077</i>	<i>0</i>	<i>0.8</i>	<i>0</i>	<i>0</i>	<i>1.877</i>
	1/0 GROUND WIRE		3,200.00	Lf	96	CN-ELEC	\$3,445	\$0	\$2,560	\$0	\$0	\$6,005
	ELEC	<i>U.C. per Lf</i>			<i>0.05</i>	<i>\$35.89</i>	<i>1.795</i>	<i>0</i>	<i>2.37</i>	<i>0</i>	<i>0</i>	<i>4.165</i>
	500 MCM 600 VOLT CABLE		13,500.00	Lf	675	CN-ELEC	\$24,226	\$0	\$31,995	\$0	\$0	\$56,221
Memo: Assume distribution transformers are located 500 Lf from the 5 kV switchgear.												
	ELEC	<i>U.C. per Lf</i>			<i>0.03</i>	<i>\$35.89</i>	<i>1.077</i>	<i>0</i>	<i>0.8</i>	<i>0</i>	<i>0</i>	<i>1.877</i>
	2/0 BARE COPPER GROUND FOR SWITCHGEAR PAD		600.00	Lf	18	CN-ELEC	\$646	\$0	\$480	\$0	\$0	\$1,126
	ELEC	<i>U.C. per Lf</i>			<i>0.032</i>	<i>\$35.89</i>	<i>1.148</i>	<i>0</i>	<i>1</i>	<i>0</i>	<i>0</i>	<i>2.148</i>
	3/0 BARE COPPER GROUND FOR SWITCHGEAR PAD		500.00	Lf	16	CN-ELEC	\$574	\$0	\$500	\$0	\$0	\$1,074
	ELEC	<i>U.C. per Ea</i>			<i>1.5</i>	<i>\$35.89</i>	<i>53.835</i>	<i>0</i>	<i>17</i>	<i>0</i>	<i>0</i>	<i>70.835</i>
	CADWELDS		70.00	Ea	105	CN-ELEC	\$3,768	\$0	\$1,190	\$0	\$0	\$4,958
	ELEC	<i>U.C. per Ea</i>			<i>1</i>	<i>\$35.89</i>	<i>35.89</i>	<i>0</i>	<i>35</i>	<i>0</i>	<i>0</i>	<i>70.89</i>
	GROUND RODS		20.00	Ea	20	CN-ELEC	\$718	\$0	\$700	\$0	\$0	\$1,418
<hr/>												
	Subtotal						\$42,422	\$0	\$53,625	\$0	\$0	\$96,047
	Sales Tax						\$0	\$0	\$3,218	\$0	\$0	\$3,218
	INEEL/Subcontractor Overheads	48.10%					\$20,407	\$0	\$27,344	\$0	\$0	\$47,750
<hr/>												
	Subtotal Estimate											\$147,015
	Escalation						\$11,856	\$0	\$15,886	\$0	\$0	\$27,742
	Continaency						\$53,652	\$0	\$71,890	\$0	\$0	\$125,543
<hr/>												
—Total 4.2.01.02.01.05.4.4 CONDUCTORS AND GROUNDING					1,182		\$128,337	\$0	\$171,962	\$0	\$0	\$300,299

4.2.01.02.01.05.4.5 TESTING

	ELEC	<i>U.C. per ls</i>			<i>200</i>	<i>\$35.89</i>	<i>7178</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>7178</i>
	Testing of systems and equipment		1.00	ls	200	CN-ELEC	\$7,178	\$0	\$0	\$0	\$0	\$7,178

DETAIL ITEM REPORT

Project Name: **OU 7-10 Staged Interim Action**
Stage III Project-Treatment-Max Treat with TD (Re-escalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
4.2.01.02.01.05.4.5 TESTING												
	Subtotal						\$7,178	\$0	\$0	\$0	\$0	\$7,178
	Sales Tax						\$0	\$0	\$0	\$0	\$0	\$0
	INEEU Subcontractor Overheads	48.10%					\$3,453	\$0	\$0	\$0	\$0	\$3,453
	Subtotal Estimate											\$10,631
	Escalation						\$2,006	\$0	\$0	\$0	\$0	\$2,006
	Contingency						\$9,078	\$0	\$0	\$0	\$0	\$9,078
—Total 4.2.01.02.01.05.4.5 TESTING					200		\$21,715	\$0	\$0	\$0	\$0	\$21,715

4.2.01.02.02 WRPF - EARTHWORK

	DIRT	<i>U.C. per CY</i>					0	0	0	3.51	0	3.51
	FOUNDATION EXCAVATION		9,259.00	CY	0		\$0	\$0	\$0	\$32,499	\$0	\$32,499
	DIRT	<i>U.C. per CY</i>					0	0	0	13.87	0	13.87
	FOUNDATION BACKFILL & COMPACT		8,387.00	CY	0		\$0	\$0	\$0	\$116,328	\$0	\$116,328
	DIRT	<i>U.C. per CY</i>					0	0	0	1.8	0	1.8
	SPREAD EXCESS EXCAVATED MATERIAL		872.00	CY	0		\$0	\$0	\$0	\$1,570	\$0	\$1,570
	Subtotal						\$0	\$0	\$0	\$150,396	\$0	\$150,396
	Sales Tax						\$0	\$0	\$0	\$0	\$0	\$0
	INEEL/Subcontractor Overheads	41.93%					\$0	\$0	\$0	\$63,066	\$0	\$63,066
	Subtotal Estimate											\$213,462
	Escalation						\$0	\$0	\$0	\$40,280	\$0	\$40,280
	Contingency						\$0	\$0	\$0	\$182,285	\$0	\$182,285
—Total 4.2.01.02.02 WRPF - EARTHWORK					0		\$0	\$0	\$0	\$436,028	\$0	\$436,028

4.2.01.03 WRPF - CONCRETE

	GEN	<i>U.C. per CY</i>					0	0	0	430	0	430
	FOUNDATION WALLS & FTGS.		662.00	CY	0		\$0	\$0	\$0	\$284,660	\$0	\$284,660

DETAIL ITEM REPORT

Project Name: **OU 7-10 Staged Interim Action**
Stage III Project-Treatment- Max Treat with TD (Re-escalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
4.2.01.03WRPF - CONCRETE												
	MISC & EQUIP FDNS	GEN	<i>U.C. per CY</i>									
			210.00	CY	0		\$0	\$0	\$0	430	\$0	430
										\$90,300		\$90,300
	FLOORS	GEN	<i>U.C. per CY</i>									
			1,544.00	CY	0		\$0	\$0	\$0	430	\$0	430
										\$663,920		\$663,920
	WALLS	GEN	<i>U.C. per CY</i>									
			2,389.00	CY	15.811	\$34.52	545.803	0	191.31	79.26	0	816.373
					37,773	CN-SKWK	\$1,303,922	\$0	\$457,040	\$189,352	\$0	\$1,950,314
	COLUMNS	GEN	<i>U.C. per CY</i>									
			866.00	CY	8.525	\$34.52	294.283	0	131.8	306.18	0	732.263
					7,383	CN-SKWK	\$254,849	\$0	\$114,139	\$265,152	\$0	\$634,140
	BEAMS & GIRDERS	GEN	<i>U.C. per CY</i>									
			741.00	CY	9.404	\$34.52	324.626	0	143.8	235.81	0	704.236
					6,968	CN-SKWK	\$240,548	\$0	\$106,556	\$174,735	\$0	\$521,839
<hr/>												
	Subtotal						\$1,799,319	\$0	\$677,734	\$1,668,119	\$0	\$4,145,173
	Sales Tax						\$0	\$0	\$40,664	\$0	\$0	\$40,664
	INEEUSubcontractorOverheads		29.03%				\$522,342	\$0	\$208,551	\$484,255	\$0	\$1,215,148
<hr/>												
	Subtotal Estimate											\$5,400,985
	Escalation						\$438,098	\$0	\$174,915	\$406,153	\$0	\$1,019,166
	Contingency						\$1,982,576	\$0	\$791,565	\$1,838,013	\$0	\$4,612,154
<hr/>												
— Total 4.2.01.03WRPF - CONCRETE					52,124		\$4,742,335	\$0	\$1,893,430	\$4,396,540	\$0	\$11,032,305

4.2.01.05WRPF - METALS

	ROOF DECK	STEEL	<i>U.C. per SF</i>									
			62,500.00	SF	0.012	\$42.71	0.519	0.288	2.883	0	0	3.49
					759	STEEL1	\$32,435	\$17,985	\$167,688	\$0	\$0	\$218,107

DETAIL ITEM REPORT

Project Name: **OU 7-10 Staged InterIm Action**
Stage III Project-Treatment-Max Treat with TD (Re-escalated)
Project Location: **INEEL-RWMC**
Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
Prepared By: **R. D. Adams / S. N. Wasley**
Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipmen</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
4.2.01.05 WRPf - METALS												
	Subtotal						\$32,435	\$17,985	\$167,688	\$0	\$0	\$218,107
	Sales Tax						\$0	\$0	\$10,061	\$0	\$0	\$10,061
	INEEL/Subcontractor Overheads	41.93%					\$13,601	\$7,541	\$74,535	\$0	\$0	\$95,678
	Subtotal Estimate											5323,847
	Escalation						\$8,687	\$4,817	\$47,606	\$0	\$0	\$61,110
	Continoencv						\$39,313	\$21,798	\$215,437	\$0	\$0	\$276,548
— Total 4.2.01.05 WRPf - METALS					759		\$94,036	\$52,141	\$515,327	\$0	\$0	\$661,504
4.2.01.07 WRPf - THERMAL & MOISTURE PROTECTION												
	ROOF INSULATION	ROOF	U.C. per SF				0	0	0	1.931	0	1.931
			62,500.00	SF	0		\$0	\$0	\$0	\$120,706	\$0	\$120,706
	ROOFING	ROOF	U.C. per SF				0	0	0	2.938	0	2.938
			62,500.00	SF	0		\$0	\$0	\$0	\$183,594	\$0	\$183,594
	EXTERIOR WALL INSULATION	INSUL	U.C. per SF				0	0	0	1.71	0	1.71
			51,060.00	SF	0		\$0	\$0	\$0	\$87,313	\$0	\$87,313
	EXTERIOR WALL METAL SIDING	STEEL	U.C. per SF			0.068	\$36.82	2.485	0	4.47	0	6.955
			51,060.00	SF	3,447	CN-SHEE	\$126,902	\$0	\$228,238	\$0	\$0	\$355,140
	Subtotal						\$126,902	\$0	\$228,238	\$391,613	\$0	\$746,753
	Sales Tax						\$0	\$0	\$13,694	\$0	\$0	\$13,694
	INEEL/Subcontractor Overheads	41.93%					\$53,214	\$0	\$101,450	\$164,215	\$0	\$318,878
	Subtotal Estimate											\$1,079,325
	Escalation						\$33,988	\$0	\$64,796	\$104,885	\$0	\$203,669
	Continaencv						\$153,809	\$0	\$293,230	\$474,647	\$0	\$921,686
— Total 4.2.01.07 WRPf -THERMAL & MOISTURE PROTECTION					3,447		\$367.913	\$0	\$701,408	\$1,135,359	\$0	\$2,204,680

DETAIL ITEM REPORT

Project Name: **OU 7-10 Staged Interim Action**
Stage III Project-Treatment-Max Treat with TD (Re-escalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
4.2.01.08 WRPf - DOORS & WINDOWS												
	PERSONNEL DOORS 3'X7'	GEN	7.00	EA	6.885	\$35.81	246.551	0	903.89	0	0	1150.441
		U.C. per EA			48	CN-CARP	\$1,726	\$0	\$6,327	\$0	\$0	\$8,053
	PERSONNEL DOORS 6'X7'	GEN	3.00	EA	14.58	\$35.81	522.11	0	2089.37	0	0	2611.48
		U.C. per EA			44	CN-CARP	\$1,566	\$0	\$6,268	\$0	\$0	\$7,834
Subtotal							53,292	\$0	\$12,595	\$0	50	\$15,888
Sales Tax							\$0	\$0	\$756	\$0	\$0	5756
INEEUSubcontractorOverheads							29.03%	\$956	\$0	\$3,876	\$0	\$4,832
Subtotal Estimate												\$21,475
Escalation							\$802	\$0	\$3,251	\$0	\$0	\$4,052
Contingency							\$3,627	\$0	\$14,711	\$0	\$0	\$18,338
—Total 4.2.01.08 WRPf - DOORS & WINDOWS					92		\$8,677	\$0	\$35,188	\$0	\$0	\$43,865

4.2.01.11 WRPf - EQUIPMENT-INSTALLGFE

Memo: From "Plant Design and Economics for Chemical Engineers." the average installation costs are about 25% of purchase price. Due to the very specialized nature of some of these systems (and the very high system purchase prices), assume installation will be one-half the average or 12.5% of purchase price. This factor will only apply to the non-HVAC and non-I&C equipment. HVAC and I&C equipment installation will be detailed separately.

EQUIPMENT INSTALLATION	U.C. per \$	61,320,957.00	\$	0		0.125	\$7,665,120	\$0	\$0	\$0	\$0	\$7,665,120
Subtotal							\$7,665,120	\$0	\$0	\$0	\$0	\$7,665,120
Sales Tax							\$0	\$0	\$0	\$0	\$0	\$0
INEEUSubcontractorOverheads							0.00%	\$0	\$0	\$0	\$0	\$0
Subtotal Estimate												\$7,665,120
Escalation							\$1,446,408	\$0	\$0	\$0	\$0	\$1,446,408
Contingency							\$6,545,604	\$0	\$0	\$0	\$0	\$6,545,604
—Total 4.2.01.11 WRPf - EQUIPMENT-INSTALLGFE					0		\$15,657,131	\$0	\$0	\$0	\$0	\$15,657,131

DETAIL ITEM REPORT

Project Name: **OU 7-10 Staged InterIm Action**
Stage III Project-Treatment-Max Treat with TD (Re-escalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
<u>4.2.01.15.01 WRPF - INSTALL HVAC EQUIPMENT & DUCT</u>												
	PIPE	<i>U.C. per EA</i>			60	\$36.82	2209.2	0	0	0	0	2209.2
	1000 kW HEATER SECTION (PREHEAT)		1.00	EA	60	CN-SHEE	\$2,209	\$0	\$0	\$0	\$0	\$2,209
	PIPE	<i>U.C. per EA</i>			160	\$36.82	5891.2	0	0	0	0	5891.2
	INLET HEPA FILTER TRAIN 6X4 (1,500CFM/ FILTER)		2.00	EA	320	CN-SHEE	\$11,782	\$0	\$0	\$0	\$0	\$11,782
Memo: The cost for this filter train includes; inlet isolation dampers, prefilter section, test inlet, HEPA filters, test outlet, & outlet isolation damper.												
	PIPE	<i>U.C. per EA</i>			160	\$36.82	5891.2	0	0	0	0	5891.2
	OUTLET HEPA FILTER TRAIN 6X4 (1,500CFM/ FILTER)		2.00	EA	320	CN-SHEE	\$11,782	\$0	\$0	\$0	\$0	\$11,782
Memo: The cost for this filter train includes; inlet isolation dampers, mist eliminator, TI, charcoal filter, heater section (RH control), prefilter section, test inlet, HEPA filters, test combination, & outlet isolation damper.												
	PIPE	<i>U.C. per EA</i>			150	\$36.82	5523	0	0	0	0	5523
	MAIN EXHAUST FAN (62,500CFM- 300 HP)		1.00	EA	150	CN-SHEE	\$5,523	\$0	\$0	\$0	\$0	\$5,523
	PIPE	<i>U.C. per EA</i>			120	\$36.82	4418.4	0	0	0	0	4418.4
	BACK-UP EXHAUST FAN (11,000CFM-200 HP)		1.00	EA	120	CN-SHEE	\$4,418	\$0	\$0	\$0	\$0	\$4,410
	PIPE	<i>U.C. per EA</i>			8	\$36.82	294.56	0	0	0	0	294.56
	RADIANT HEATERS 13.5 KW		18.00	EA	144	CN-SHEE	\$5,302	\$0	\$0	\$0	\$0	\$5,302
	PIPE	<i>U.C. per EA</i>			60	\$36.82	2209.2	0	0	0	0	2209.2
	COMPUTER ROOM AC UNIT (10 TON GLYCOL UNIT)		1.00	EA	60	CN-SHEE	\$2,209	\$0	\$0	\$0	\$0	\$2,209
	HVAC	<i>U.C. per LBS</i>			0.2	\$36.82	7.364	0.3	2	0	0	9.664
	STAINLESS STEEL DUCTWORK (BASED ON 1 LBS/SF)		62,500.00	LBS	12,500	CN-SHEE	\$460,250	\$18,750	\$125,000	\$0	\$0	\$604,000

DETAIL ITEM REPORT

Project Name: **OU 7-10 Staged Interim Action**
Stage III Project-Treatment- Max Treat with TD (Re-escalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

Code	Description	Contractor	Qty	UOM	Hrs	Resource	Labor	Equipment	Material	Subcontractor	Other	TOTAL
4.2.01.15.01	WRPF • INSTALL HVAC EQUIPMENT & DUCT											
	HVAC	U.C. per LBS			0.08	\$36.82	2.946	0.3	0.75	0	0	3.996
	GALVANIZED STEEL DUCTWORK (BASED ON 1 LBS/SF)		62,500.00	LBS	5.000	CN-SHEE	\$184,100	\$18,750	\$46,875	\$0	\$0	\$249,725
Subtotal							\$687,577	\$37,500	\$171,875	\$0	\$0	\$896,952
Sales Tax							\$0	\$0	\$10,313	\$0	\$0	\$10,313
INEEU Subcontractor Overheads							\$314,847	\$17,113	\$83,142	\$0	\$0	\$415,102
Subtotal Estimate												\$1,322,367
Escalation							\$189,157	\$10,306	\$50,068	\$0	\$0	\$249,531
Contingency							\$856,016	\$46,637	\$226,578	\$0	\$0	\$1,129,231
— Total 4.2.01.15.01 WRPF • INSTALL HVAC EQUIPMENT & DUCT					18,674		\$2,047,597	\$111,556	\$541,975	\$0	\$0	\$2,701,128

4.2.01.15.02 WRPF • FIRE PROTECTION

Memo: Costs are based on contacting a local fire protection vendor that has provided many hours of time as a consultant for the INEEL. This company has also design and installed many fire protection systems at the INEEL, as well as the GEM project. Fire system control costs are based on the GEM Project design, assume the same type system and coverage will be required for this facility.

	FP	U.C. per SF				0	0	0	3.4	0	3.4	
WRPF FACILITY FIRE SYSTEM CONTROLS			62,500.00	SF	0	CN-SPRI	\$0	\$0	\$0	\$212,500	\$0	\$212,500
	FP	U.C. per SF				0	0	0	3.65	0	3.65	
WRPF-DRY PIPE FIRE PROTECTION			62,500.00	SF	0	CN-SPRI	\$0	\$0	\$0	\$228,125	\$0	\$228,125
	FP	U.C. per SF				0	0	0	3.65	0	3.65	
WRPF-DRY PIPE FIRE PROTECTION (SECONDARY COVERAGE UNDER EQUIPMENT)			62,500.00	SF	0	CN-SPRI	\$0	\$0	\$0	\$228,125	\$0	\$228,125
	FP	U.C. per LF				0	0	0	65.3	0	65.3	
WRPF- FEED MAINS			1,000.00	LF	0	CN-SPRI	\$0	\$0	\$0	\$65,300	\$0	\$65,300
	FP	U.C. per LS				0	0	0	100000	0	100000	
WRPF-EXTRA HAZARD FOAM SYSTEM (EQUIPMENT ONLY)			1.00	LS	0	CN-SPRI	\$0	\$0	\$0	\$100,000	\$0	\$100,000
	FP	U.C. per SF				0	0	0	4.35	0	4.35	
WRPF-EXTRA HAZARD FOAM PIPING DISTRIBUTION SYSTEM			62,500.00	SF	0	CN-SPRI	\$0	\$0	\$0	\$271,875	\$0	\$271,875

DETAIL ITEM REPORT

Project Name: **OU 7-10 Staged Interim Action**
Stage III Project-Treatment-Max Treat with TD (Re-escalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
4.2.01.15.02WRPF - FIRE PROTECTION												
Memo: Costs are based on contacting a local fire protection vendor that has provided many hours of time as a consultant for the INEEL. This company has also design and installed many fire protection systems at the INEEL, as well as the GEM project. Fire system control costs are based on the GEM Project design, assume the same type system and coverage will be required for this facility.												
	FP	U.C. per EA					0	0	0	10000	0	10000
	WRPF-EXTRA HAZARD FOAM MONITOR NOZZLES		6.00	EA	0	CN-SPRI	\$0	\$0	\$0	\$60,000	\$0	\$60,000
		U.C. per CF					0	0	0	30.17	0	30.17
	WRPF-GLOVEBOX MIST SYSTEM		73,495.00	CF	0		\$0	\$0	\$0	\$2,217,344	\$0	\$2,217,344
Memo: Cost per cubic foot is based on the GEM facility glovebox fire protection misting system. Due to the extremely large sized gloveboxes an economy of scale factor was used @ 50% of GEM project.												
Subtotal							\$0	\$0	\$0	\$3,383,269	\$0	\$3,383,269
Sales Tax							\$0	\$0	\$0	\$0	\$0	\$0
INEEL Subcontractor Overheads							\$0	\$0	\$0	\$488,907	\$0	\$488,907
Subtotal Estimate												\$3,872,176
Escalation							\$0	\$0	\$0	\$730,680	\$0	\$730,680
Contingency							\$0	\$0	\$0	\$3,306,632	\$0	\$3,306,632
Total 4.2.01.15.02 WRPF - FIRE PROTECTION					0		\$0	\$0	\$0	\$7,909,489	\$0	\$7,909,489

4.2.01.15.03WRPF - PLANT AIR

Memo: Costs are based on the GEM Project design, assume the same type system and coverage will be required for this facility. Equipment cost for the compressor is by the retrieval project.

	U.C. per SF						0	0	0	2.04	0	2.04
	WRPF-PLANT AIR DIST. SYSTEM		62,500.00	SF	0		\$0	\$0	\$0	\$127,500	\$0	\$127,500
Subtotal							\$0	\$0	\$0	\$127,500	\$0	\$127,500
Sales Tax							\$0	\$0	\$0	\$0	\$0	\$0
INEEL/Subcontractor Overheads							\$0	\$0	\$0	\$0	\$0	\$0
Subtotal Estimate												\$127,500
Escalation							\$0	\$0	\$0	\$24,059	\$0	\$24,059
Contingency							\$0	\$0	\$0	\$108,878	\$0	\$108,878
Total 4.2.01.15.03 WRPF - PLANT AIR					0		\$0	\$0	\$0	\$260,437	\$0	\$260,437

DETAIL ITEM REPORT

Project Name: **OU 7-70 Staged Interim Action**
Stage III Project-Treatment-Max Treat with TD (Re-escalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
<u>4.2.01.15.04 WRPF - BREATHING AIR</u>												
<i>Memo: Costs are based on the GEM Project design, assume the same type system and coverage will be required for this facility. No costs for the breathing air compressor have been included, assume provided to the project by the 88WI equipment pool at no cost to this project.</i>												
	WRPF-BREATHINGAIR DIST SYSTEM		62,500.00	SF	0		0 \$0	0 \$0	0 \$0	11.2 \$700,000	0 \$0	112 \$700,000
Subtotal							\$0	\$0	\$0	\$700,000	\$0	\$700,000
Sales Tax							\$0	\$0	\$0	\$0	\$0	\$0
INEEL/Subcontractor Overheads							\$0	\$0	\$0	\$0	\$0	\$0
Subtotal Estimate												\$700,000
Escalation							\$0	\$0	\$0	\$132,090	\$0	\$132,090
Contingency							\$0	\$0	\$0	\$597,763	\$0	\$597,763
— Total 4.2.01.15.04 WRPF - BREATHING AIR					0		\$0	\$0	\$0	\$1,429,853	\$0	\$1,429,853

WRPF - PROCESS PIPING

Memo: Allowance is based on previous detail take-off process piping system.

	PIPE				0.182	\$39.33	7.158	0	32.7	0	0	39.858
	PROCESS PIPING ALLOWANCE (assume 50% reduction due to the equipment type)		31,250.00	SF	5.688	CN-PIPE	\$223,689	\$0	\$1,021,875	\$0	\$0	\$1,245,564
Subtotal							\$223,689	\$0	\$1,021,875	\$0	\$0	\$1,245,564
Sales Tax							\$0	\$0	\$61,313	\$0	\$0	\$61,313
INEEL Subcontractor Overheads							\$107,604	\$0	\$521,057	\$0	\$0	\$628,660
Subtotal Estimate												\$1,935,537
Escalation							\$62,515	\$0	\$302,721	\$0	\$0	\$365,236
Contingency							\$282,906	\$0	\$1,369,939	\$0	\$0	\$1,652,845
-- Total WRPF - PROCESS PIPING					5,688		\$676,714	\$0	\$3,276,904	\$0	\$0	\$3,953,618

DETAIL ITEM REPORT

Project Name: *OU 7-70 Staged InterIm Action*
Stage III Project-Treatment-Max Treat with TD (Re-escalated)
 Project Location: *INEEL-RWMC*
 Estimate Number: *5974-2 (4a+3aP)*

Client: *S. L. Austad*
 Prepared By: *R. D. Adams / S. N. Wasley*
 Estimate Type: *Project Support*

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
4.2.01.16.01 WRPF - GENERAL FACILITIES ELECTRICAL												
<i>Memo: Costs are based on the GEM project calculated square footage.</i>												
	FACILITY RACEWAYS	<i>U.C. per SF</i>	62,500.00	SF	0		0 \$0	0 \$0	0 \$0	17 \$1,062,500	0 \$0	17 \$1,062,500
	FACILITY WIRE & CABLE	<i>U.C. per SF</i>	62,500.00	SF	0		0 \$0	0 \$0	0 \$0	6.36 \$397,500	0 \$0	6.36 5397,500
	FACILITY LIGHTING	<i>U.C. per SF</i>	62,500.00	SF	0		0 \$0	0 \$0	0 \$0	8.75 \$546,875	0 \$0	8.75 5546,875
	FACILITY MISC. (TELEPHONE, LIGHTNING PROTECTION, ETC.)	<i>U.C. per SF</i>	62,500.00	SF	0		0 \$0	0 \$0	0 \$0	5.45 \$340,625	0 \$0	5.45 \$340,625
Subtotal							\$0	\$0	\$0	\$2,347,500	\$0	\$2,347,500
Sales Tax							\$0	\$0	\$0	\$0	\$0	\$0
INEEUSubcontractor Overheads							\$0	\$0	\$0	\$0	\$0	\$0
Subtotal Estimate												\$2,347,500
Escalation							\$0	\$0	\$0	\$442,973	\$0	\$442,973
Contingency							\$0	\$0	\$0	\$2,004,640	\$0	\$2,004,640
--Total 4.2.01.16.01 WRPF - GENERAL FACILITIES ELECTRICAL					0		\$0	\$0	\$0	\$4,795,113	\$0	\$4,795,113

4.2.01.16.02.1 SWITCHGEAR

	MCC-2000,4000 AMP	ELEC	<i>U.C. per Ea</i>	100 Ea	160	\$3589	5742.4	5000	56000	0	0	68742.4
<i>Memo Estimate is based on R S Means and G E Buy Log for material pricing. The estimate assumes this gear will have a HPS for a main breaker, will require metering, and will be gfc protected. All panel pricing is based on the above listed sources.</i>												
	SMCC-0082,600 AMP	ELEC	<i>U.C. per Ea</i>	1.00 Ea	24	\$35.89	861.36	0	6500	0	0	7361.36
					24	CN-ELEC	\$861	\$0	\$6,500	\$0	\$0	\$7,361
	PP-2000,600 AMP	ELEC	<i>U.C. per Ea</i>	1.00 Ea	24	\$35.89	861.36	0	6500	0	0	7361.36
					24	CN-ELEC	\$861	\$0	\$6,500	\$0	\$0	\$7,361
<i>Memo: Assume this will be a 4000 amp switchboard. 5000 amp is a nonstandard unit and pricing is not available.</i>												

DETAIL ITEM REPORT

Project Name: OU 7-10 Staged Interim Action
 Stage III Project-Treatment-Max Treat with TD (Re-escalated)
 Project Location: INEEL-RWMC
 Estimate Number: 5974-2 (4a+3aP)

Client: S. L. Austad
 Prepared By: R. D. Adams / S. N. Wasley
 Estimate Type: Project Support

Code	Description	Contractor	Qty	UOM	Hrs	Resource	Labor	Equipment	Material	Subcontractor	Other	TOTAL
<u>4.2.01.16.02.1 SWITCHGEAR</u>												
	BUS-INC-OG.4000 AMP	ELEC	U.C. per Ea	1.00	Ea	0	CN-ELEC	0	46000	0	0	46000
								\$0	\$46,000	\$0	\$0	\$46,000
	BUS-TD, 4000 AMP	ELEC	U.C. per Ea	1.00	Ea	0	CN-ELEC	0	56000	0	0	56000
								\$0	\$56,000	\$0	\$0	\$56,000
	BUS-BPS-TD,500 AMP	ELEC	U.C. per Ea	1.00	Ea	24	CN-ELEC	861.36	6500	0	0	7361.36
						24		\$861	\$6,500	\$0	\$0	\$7,361
	BUS-LPC,500 AMP	ELEC	U.C. per Ea	1.00	Ea	24	CN-ELEC	861.36	6500	0	0	7361.36
						24		\$861	\$6,500	\$0	\$0	\$7,361
	BUS-4000-SB.2000 AMP	ELEC	U.C. per Ea	1.00	Ea	24	CN-ELEC	861.36	24500	0	0	25361.36
						24		\$861	\$24,500	\$0	\$0	\$25,361
	480 VOLT DISTRIBUTION PANELS	ELEC	U.C. per Ea	14.00	Ea	36	CN-ELEC	574.24	5000	0	0	5574.24
						224		\$8,039	\$70,000	\$0	\$0	\$78,039
	120/208 PANELS	ELEC	U.C. per Ls	1.00	Ls	80	CN-ELEC	2871.2	10000	0	0	12871.2
						80		\$2,871	\$10,000	\$0	\$0	\$12,871
	ALLOWANCE FOR DISCONNECTS AND SMALL STRATERS	ELEC	U.C. per Ls	1.00	Ls	120	CN-ELEC	4306.8	10000	0	0	14306.8
						120		\$4,307	\$10,000	\$0	\$0	\$14,307
	ALLOWANCE FOR SMALL STEP DOWN TRANSFORMERS	ELEC	U.C. per Ls	1.00	Ls	40	CN-ELEC	1435.6	5000	0	0	6435.6
						40		\$1,436	\$5,000	\$0	\$0	\$6,436
Subtotal								\$26,702	\$5,000	\$303,500	\$0	\$335,202
Sales Tax								\$0	\$0	\$18,210	\$0	\$18,210
INEEUSubcontractorOverheads							48.10%	\$12,845	\$2,405	\$154,755	\$0	\$170,005
Subtotal Estimate												\$523,418
Escalation								\$7,463	\$1,397	\$89,909	\$0	\$98,769
Contingency								\$33,771	\$6,324	\$406,876	\$0	\$446,971
— Total 4.2.01.16.02.1 SWITCHGEAR					744			\$90,780	\$15,126	\$973,250	\$0	\$1,069,157

DETAIL ITEM REPORT

Project Name: **OU 7-10 Staged Interim Action**
Stage III Project-Treatment-Max Treat with TD (Re-escalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams/S. N. Wasley**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
<u>4.2.01.16.02.2 EQUIPMENT CONTROLS</u>												
	ELEC	<i>U.C. per Ls</i>			360	\$35.89	12520.4	0	35000	0	0	47920.4
	PLC CONTROLLER, INCLUDING I/O's, SIGNAL POINTS, TRANSMITTERS		1.00	Ls	360	CN-ELEC	\$12,920	\$0	\$35,000	\$0	\$0	\$47,920
Subtotal							\$12,920	\$0	\$35,000	\$0	\$0	\$47,920
Sales Tax							\$0	\$0	\$2,100	\$0	\$0	\$2,100
INEEUSubcontractorOverheads							\$6,215	\$0	\$17,847	\$0	\$0	\$24,062
Subtotal Estimate												\$74,082
Escalation							\$3,611	\$0	\$10,368	\$0	\$0	\$13,979
Contingency							\$16,341	\$0	\$46,921	\$0	\$0	\$63,262
— Total 4.2.01.16.02.2 EQUIPMENT CONTROLS					360		\$39,087	\$0	\$112,236	\$0	\$0	5151,324
<u>4.2.01.16.02.3 RACEWAYS AND ENCLOSURES</u>												
	ELEC	<i>U.C. per Ls</i>			40	\$35.89	1435.6	0	2000	0	0	3435.6
	ALLOWANCE FOR LARGE JUNCTION BOXES AND GUTTER		1.00	Ls	40	CN-ELEC	\$1,436	\$0	\$2,000	\$0	\$0	\$3,436
	ELEC	<i>U.C. per Lf</i>			0.24	\$35.89	8.614	0	3.31	0	0	11.924
	2" GRC WITH FITTINGS AND SUPPORTS		5,100.00	Lf	1,224	CN-ELEC	\$43,929	\$0	\$16,881	\$0	\$0	\$60,810
Memo: The estimate assumes an average size of branch feeder conduits will be 2" and that the average length of the conduit run will be 150 lf.												
	ELEC	<i>U.C. per Lf</i>			0.16	\$35.89	5.742	0	0.52	0	0	6.262
	1/0 THHN COPPER WIRE		1,700.00	Lf	272	CN-ELEC	\$9,762	\$0	\$884	\$0	\$0	\$10,646
Subtotal							\$55,127	\$0	\$19,765	\$0	\$0	\$74,892
Sales Tax							\$0	\$0	\$1,186	\$0	\$0	\$1,186
INEEUSubcontractorOverheads							\$26,518	\$0	\$10,078	\$0	\$0	\$36,597
Subtotal Estimate												\$112,674
Escalation							\$15,406	\$0	\$5,855	\$0	\$0	\$21,262
Contingency							\$69,721	\$0	\$26,497	\$0	\$0	\$96,218
— Total 4.2.01.16.02.3 RACEWAYS AND ENCLOSURES					1,536		\$166,773	\$0	\$63,382	\$0	\$0	\$230,154

DETAIL ITEM REPORT

Project Name: **OU 7-10 Staged Interim Action**
Stage III Project-Treatment- Max Treat with TD (Re-escalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
4.2.01.16.02.4 CONDUCTORS AND GROUNDING												
	ELEC	<i>U.C. per Lf</i>			<i>0.4</i>	<i>\$35.89</i>	<i>14.356</i>	<i>0</i>	<i>1.22</i>	<i>0</i>	<i>0</i>	<i>15.576</i>
250	MCMTHHN COPPER WIRE FEEDERS		17,000.00	Lf	6,800	CN-ELEC	\$244,052	\$0	\$20,740	\$0	\$0	\$264,792
	ELEC	<i>U.C. per Ea</i>			<i>8</i>	<i>\$35.89</i>	<i>287.12</i>	<i>0</i>	<i>150</i>	<i>0</i>	<i>0</i>	<i>437.12</i>
	ALLOWANCE FOR MOTOR CONNECTIONS AND TESTING		63.00	Ea	504	CN-ELEC	\$18,089	\$0	\$9,450	\$0	\$0	\$27,539
Subtotal							\$262,141	\$0	\$30,190	\$0	\$0	\$292,331
Sales Tax							\$0	\$0	\$1,811	\$0	\$0	\$1,811
INEEUSubcontractor Overheads							\$126,100	\$0	\$15,394	\$0	\$0	\$141,494
Subtotal Estimate												\$435,636
Escalation							\$73,261	\$0	\$8,944	\$0	\$0	\$82,205
Contingency							\$331,537	\$0	\$40,473	\$0	\$0	\$372,010
— Total 4.2.01.16.02.4 CONDUCTORS AND GROUNDING					7,304		\$793,039	\$0	\$96,812	\$0	\$0	\$889,850

4.2.01.16.02.5 TESTING

	ELEC	<i>U.C. per ls</i>			<i>200</i>	<i>\$35.89</i>	<i>7178</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>7178</i>
	Testing of systems and equipment		1.00	ls	200	CN-ELEC	\$7,178	\$0	\$0	\$0	\$0	\$7,178
Subtotal							\$7,178	\$0	\$0	\$0	\$0	\$7,178
Sales Tax							\$0	\$0	\$0	\$0	\$0	\$0
INEEUSubcontractor Overheads							\$3,453	\$0	\$0	\$0	\$0	\$3,453
Subtotal Estimate												\$10,631
Escalation							\$2,006	\$0	\$0	\$0	\$0	\$2,006
Contingency							\$9,078	\$0	\$0	\$0	\$0	\$9,078
— Total 4.2.01.16.02.5 TESTING					200		\$21,715	\$0	\$0	\$0	\$0	\$21,715

DETAIL ITEM REPORT

Project Name: **OU 7-70 Staged Interim Action**
Stage III Project-Treatment-Max Treat with TD (Re-escalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>EquipDment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
4.2.01.16.03 WRPf - MONITORING AND CONTROLS												
Memo: Installation, raceways, and cabling @ 50% of I&C procurement cost.												
	I&C INSTALLATION, RACEWAYS, & CABLING	U.C. per LS	1.00	LS	0		0	0	0	80450	0	80450
							\$0	\$0	\$0	\$80,450	\$0	\$80,450
<hr/>												
	Subtotal						\$0	\$0	\$0	\$80,450	\$0	\$80,450
	Sales Tax						\$0	\$0	\$0	\$0	\$0	\$0
	INEEUSubcontractor Overheads	0.00%					\$0	\$0	\$0	\$0	\$0	\$0
<hr/>												
	Subtotal Estimate											\$00,450
	Escalation						\$0	\$0	\$0	\$15,181	\$0	\$15,181
	Contingency						\$0	\$0	\$0	\$68,700	\$0	\$68,700
<hr/>												
--Total	4.2.01.16.03 WRPf - MONITORING AND CONTROLS				0		\$0	\$0	\$0	\$164,331	\$0	\$164,331
<hr/>												
4.2.01.16.04 WRPf - CRITICALITY & RAD MONITORING SYSTEMS INSTALLATION												
	CRITICALITY SYSTEM INSTALLATION	U.C. per EA	3.00	EA	0		0	0	0	20185	0	20185
							\$0	\$0	\$0	\$60,555	\$0	\$60,555
Memo: Based on the GEM project installation costs for criticality equipment.												
	RADIOLOGICAL MONITORING EQUIPMENT INSTALLATION	U.C. per LS	1.00	LS	0		0	0	0	16349	0	16349
							\$0	\$0	\$0	\$16,349	\$0	\$16,349
<hr/>												
	Subtotal						\$0	\$0	\$0	\$76,904	\$0	\$76,904
	Sales Tax						\$0	\$0	\$0	\$0	\$0	\$0
	INEEUSubcontractor Overheads	0.00%					\$0	\$0	\$0	\$0	\$0	\$0
<hr/>												
	Subtotal Estimate											\$76,904
	Escalation						\$0	\$0	\$0	\$14,512	\$0	\$14,512
	Contingency						\$0	\$0	\$0	\$65,672	\$0	\$65,672
<hr/>												
--Total	4.2.01.16.04 WRPf - CRITICALITY & RAD MONITORING SYSTEMS INSTALLATION				0		\$0	\$0	\$0	\$157,088	\$0	\$157,088

DETAIL ITEM REPORT

Project Name: **OU 7-70 Staged Interim Action**
Stage III Project-Treatment-Max Treat with TD (Re-escalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasiey**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
4.2.01.16.05	WRPF - CCTV MONITORING SYSTEM											
Memo: Costs are based on the GEM project calculated square footage.												
	CCTV MONITORING SYSTEM-INSTALLATION LABOR		62,500.00	SF	0							
	U.C. per SF											
							\$0	\$0	\$0	1.36	\$0	1.36
	Memo: Unit costs are based on the GEM project. Camera equipment costs are included in the procurement WBS.											
	Subtotal						\$0	\$0	\$0	\$85,000	\$0	\$85,000
	Sales Tax						\$0	\$0	\$0	\$0	\$0	\$0
	INEEL/Subcontractor Overheads		0.00%				\$0	\$0	\$0	\$0	\$0	\$0
	Subtotal Estimate											\$85,000
	Escalation						\$0	\$0	\$0	\$16,040	\$0	\$16,040
	Contingency						\$0	\$0	\$0	\$72,585	\$0	\$72,585
--Total	4.2.01.16.05 WRPF - CCTV MONITORING SYSTEM				0		\$0	\$0	\$0	\$173,625	\$0	\$173,625

4.2.05.01 GENERAL CONDITIONS

	SUPERVISION	GEN			0.12	\$40.00	4.8	0	0	0	0	4.8
	U.C. per HRS											
			118,333.00	HRS	14,200	CN-SUPR	\$567,998	\$0	\$0	\$0	\$0	\$567,998
Memo: @ 12% of labor hrs.												
	Mobilization & Demobilization	GEN					0	0	0	0.006	0	0.006
	U.C. per \$											
			16,145,755.00	\$	0	CN-SKWK	\$0	\$0	\$0	\$96,875	\$0	\$96,875
Memo: Mobilization/demobilization costs @ .6% of direct construction \$.												
	CONSTRUCTION EQUIPMENT ALLOWANCE	GEN					0	4	0	0	0	4
	U.C. per HRS											
			118,333.00	HRS	0		\$0	\$473,332	\$0	\$0	\$0	\$473,332
Memo: @ \$2.50/LABOR HOUR.												
	SMALL TOOLS & CONSUMABLES	GEN					0	0	0.04	0	0	0.04
	U.C. per \$											
			6,508,777.00	\$	0		\$0	\$0	\$260,351	\$0	\$0	\$260,351
Memo: @ 4% of construction labor \$.												
	GENERAL CLEANUP	GEN			0.08	\$31.58	2.526	0	0	0	0	2.526
	U.C. per HRS											
			118,333.00	HRS	9,467	CN-LABR	\$298,956	\$0	\$0	\$0	\$0	\$298,956
Memo: @ 8% of construction labor hours.												

DETAIL ITEM REPORT

Project Name: **OU 7-10 Staged Interim Action**
Stage III Project-Treatment- Max Treat with TD (Re-escalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs.</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
<u>4.2.05.01 GENERAL CONDITIONS</u>												
	GEN	U.C. par	HRS									
	CONDUCT OF OPERATIONS/CONDUCT OF MAINTENANCE		118,333.00	HRS	0.05	\$34.52	1.726	0	0	0	0	1.726
					5,917	CN-SKWK	\$204,243	\$0	\$0	\$0	\$0	\$204,243
Memo: @ 5% of labor hours.												
Subtotal							\$1,071,198	\$473,332	\$260,351	\$96,875	\$0	\$1,901,755
Sales Tax							\$0	\$0	\$15,621	\$0	\$0	\$15,621
INEEL/Subcontractor Overheads							29.03%	\$310,969	\$137,408	\$80,115	\$28,123	\$556,614
Subtotal Estimate												\$2,473,991
Escalation							\$260,815	\$115,247	\$67,194	\$23,587	\$0	\$466,842
Contingency							\$1,180,296	\$521,540	\$304,079	\$106,741	\$0	\$2,112,656
--Total 4.2.05.01 GENERAL CONDITIONS					29,503		\$2,023,278	\$1,247,527	\$727,360	\$255,325	\$0	\$5,053,409
<u>4.2.05.02.01 CHEM LEACH SITEWORK</u>												
	DIRT	U. per CY						0	0	3.51		3.51
	FOUNDATION EXCAVATION		9,095.00	CY	0		\$0	\$0	\$0	\$31,923	\$0	\$31,923
	DIRT	U.C. per CY					0	0	0	13.87	0	13.87
	FOUNDATION BACKFILL & COMPACT		8,690.00	CY	0		\$0	\$0	\$0	\$120,530	\$0	\$120,530
	DIRT	U.C. per CY					0	0	0	1.8	0	1.8
	SPREAD EXCESS EXCAVATED MATERIAL		405.00	CY	0		\$0	\$0	\$0	\$729	\$0	\$729
Subtotal							\$0	\$0	\$0	\$153,183	\$0	\$153,183
Sales Tax							\$0	\$0	\$0	\$0	\$0	\$0
INEEL Subcontractor Overheads							41.93%	\$0	\$0	\$0	\$64,234	\$64,234
Subtotal Estimate												\$217,417
Escalation							\$0	\$0	\$0	\$41,027	\$0	\$41,027
Contingency							\$0	\$0	\$0	\$185,662	\$0	\$185,662
--Total 4.2.05.02.01 CHEM LEACH SITEWORK					0		\$0	\$0	\$0	\$444,106	\$0	\$444,106

DETAIL ITEM REPORT

Project Name: **OU 7-10 Staged Interim Action**
Stage III Project-Treatment- Max Treat with TD (Re-escalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
<u>4.2.05.02.02 CHEM STORAGE & PREPARATION SITEWORK</u>												
	FOUNDATION EXCAVATION	DIRT U.C. per CY	1,629.00	CY	0		0 \$0	0 \$0	0 \$0	3.51 \$5,718	0 \$0	3.51 \$5,718
	FOUNDATION BACKFILL & COMPACT	DIRT U.C. per CY	1,481.00	CY	0		0 \$0	0 \$0	0 \$0	13.87 \$20,541	0 \$0	13.87 \$20,541
	SPREAD EXCESS EXCAVATED MATERIAL	DIRT U.C. per CY	148.00	CY	0		0 \$0	0 \$0	0 \$0	1.8 \$266	0 \$0	1.8 \$266
Subtotal							\$0	\$0	\$0	\$26,526	\$0	\$26,526
Sales Tax							\$0	\$0	\$0	\$0	\$0	\$0
INEEL/Subcontractor Overheads							\$0	\$0	\$0	\$11,123	\$0	\$11,123
Subtotal Estimate												\$37,649
Escalation							\$0	\$0	\$0	\$7,104	\$0	\$7,104
Contingency							\$0	\$0	\$0	\$32,150	\$0	\$32,150
--Total 4.2.05.02.02 CHEM STORAGE & PREPARATION SITEWORK					0		\$0	\$0	\$0	\$76,903	\$0	\$76,903

4.2.05.03.01 CHEM LEACH • CONCRETE

FOUNDATION WALLS	GEN	U.C. per CY	149.00	CY	0		0 \$0	0 \$0	0 \$0	430 \$64,070	0 \$0	430 \$64,070
COLUMN FOOTINGS	GEN	U.C. per CY	256.00	CY	0		0 \$0	0 \$0	0 \$0	430 \$110,080	0 \$0	430 \$110,080
FLOORS	GEN	U.C. per CY	989.00	CY	0		0 \$0	0 \$0	0 \$0	430 \$425,270	0 \$0	430 \$425,270

DETAIL ITEM REPORT

Project Name: **OU 7-10 Staged Interim Action**
Stage III Project-Treatment- Max Treat with TD (Re-escalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
4.2.05.03.01 CHEM LEACH- CONCRETE												
	MISC. PADS& EQUIP. FOUNDATIONS	GEN	80.00	CY	0		0	0	0	430	0	430
		U.C. per CY					\$0	\$0	\$0	\$34,400	\$0	\$34,400
Subtotal							\$0	\$0	\$0	\$633,820	\$0	\$633,820
Sales Tax							\$0	\$0	\$0	\$0	\$0	\$0
INEEL/Subcontractor Overheads							\$0	\$0	\$0	\$183,998	\$0	\$183,998
Subtotal Estimate												\$817,818
Escalation							\$0	\$0	\$0	\$154,322	\$0	\$154,322
Contingency							\$0	\$0	\$0	\$698,373	\$0	\$698,373
---Total 4.2.05.03.01CHEM LEACH- CONCRETE					0		\$0	\$0	\$0	\$1,670,513	\$0	\$1,670,513

4.2.05.03.02CHEM STORAGE & PREP. - CONCRETE

FOUNDATIONWALLS	GEN	U.C. per CY	48.00	CY	0		0	0	0	430	0	430
							\$0	\$0	\$0	\$20,640	\$0	\$20,640
COLUMN FOOTINGS	GEN	U.C. per CY	44.00	CY	0		0	0	0	430	0	430
							\$0	\$0	\$0	\$18,920	\$0	\$18,920
FLOORS	GEN	U.C. per CY	104.00	CY	0		0	0	0	430	0	430
							\$0	\$0	\$0	\$44,720	\$0	\$44,720

DETAIL ITEM REPORT

Project Name: **OU 7-70 Staged Interim Action**
Stage III Project-Treatment-Max Treat with TD (Re-escalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
4.2.05.03.02CHEM STORAGE & PREP. -CONCRETE												
	GEN	<i>U.C. per CY</i>										
	MISC. PADS & EQUIP FOUNDATIONS		33.00	CY	0		\$0	\$0	\$0	\$14,190	\$0	\$14,190
Subtotal							\$0	\$0	\$0	\$98,470	\$0	\$98,470
Sales Tax							\$0	\$0	\$0	\$0	\$0	\$0
INEEUSubcontractorOverheads							\$0	\$0	\$0	\$28,586	\$0	\$28,586
Subtotal Estimate												\$127,056
Escalation							\$0	\$0	\$0	\$23,975	\$0	\$23,975
Contingency							\$0	\$0	\$0	\$108,499	\$0	\$108,499
--Total 4.2.05.03.02CHEM STORAGE & PREP. - CONCRETE					0		\$0	\$0	\$0	\$259,530	\$0	\$259,530

4.2.05.05.01CHEM LEACH- METALS

STRUCTURAL STEEL	STEEL	<i>U.C. per TONS</i>	288.00	TONS	10.2 2,938	\$42.71 STEEL1	435.676 \$125,475	241.57 \$69,572	1668 \$480,384	0 \$0	0 \$0	2345.246 \$675,431
ROOF DECK	STEEL	<i>U.C. per SF</i>	29,697.00	SF	0.012 361	\$42.71 STEEL1	0.519 \$15,412	0.288 \$8,545	2.683 \$79,677	0 \$0	0 \$0	3.49 \$103,634
FLOOR DECK	STEEL	<i>U.C. per SF</i>	18,342.00	SF	0	STEEL1	0 \$0	0 \$0	0 \$0	3.38 \$61,996	0 \$0	3.38 \$61,996

DETAIL ITEM REPORT

Project Name: **OU 7-70 Staged Interim Action**
Stage III Project-Treatment-Max Treat with TD(Reescalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>EquipDment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>	
4.2.05.05.01 CHEM LEACH - METALS													
	STAIRWAYS .ALLOW	STEEL	U.C. per EA	4.00	EA	15 60	\$42.71 STEEL1	640.7 \$2,563	355.25 \$1,421	15000 \$60,000	0 \$0	0 \$0	15995.95 \$63,984
Subtotal								\$143,449	\$79,539	\$620,061	\$61,996	\$0	\$905,045
Sales Tax								\$0	\$0	\$37,204	\$0	\$0	\$37,204
INEEL/Subcontractor Overheads			41.93%					\$60,153	\$33,353	\$275,611	\$25,997	\$0	\$395,113
Subtotal Estimate													\$1,337,362
Escalation								\$38,420	\$21,303	\$176,034	\$16,604	\$0	\$252,360
Contingency								\$173,865	\$96,403	\$796,626	\$75,141	\$0	\$1,142,035
—Total 4.2.05.05.01 CHEM LEACH - METALS						3,358		\$415,087	\$230,597	\$1,905,535	\$179,738	\$0	\$2,731,757

4.2.05.05.02 CHEM STOR. & PREP. -METALS

STRUCTURAL STEEL	STEEL	U.C. per TONS	30.00	TONS	10.2 306	\$42.71 STEEL1	435.676 \$13,070	241.57 \$7,247	1668 \$50,040	0 \$0	0 \$0	2345.246 \$70,357
ROOF DECK	STEEL	U.C. per SF	4,200.00	SF	0.012 51	\$42.71 STEEL1	0.519 \$2,180	0.288 \$1,209	2.683 \$11,269	0 \$0	0 \$0	3.49 \$14,657
SST TRUCK PIT GRATING	STEEL	U.C. per SF	500.00	SF	0.26 130	\$43.50 CN-IRON	11.31 \$5,655	6.41 \$3,205	30.75 \$15,375	0 \$0	0 \$0	48.47 \$24,235

DETAIL ITEM REPORT

Project Name: **OU 7-70 Staged Interim Action
stage III Project-Treatment-Max Treatwith TD (Re-escalated)**
Project Location: **INEEL-RWMC**
Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
Prepared By: **R. D. Adams / S. N. Wasley**
Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
4.2.05.05.02CHEM STOR. & PREP. - METALS												
	STEEL	U.C. per TON			20	\$43.50	870	0	6000	0	0	6870
	TRUCK PIT GRATING SUPPORT STEEL		2.50	TON	50	CN-IRON	\$2,175	\$0	\$15,000	\$0	\$0	\$17,175
Subtotal							\$23,080	\$1,661	\$91,684	\$0	\$0	\$126,424
Sales Tax							\$0	\$0	\$5,501	\$0	\$0	\$5,501
INEEUSubcontractorOverheads							\$9,678	\$4,890	\$40,752	\$0	\$0	\$55,320
Subtotal Estimate												\$187,245
Escalation							\$6,181	\$3,123	\$26,029	\$0	\$0	\$35,333
Contingency							\$27,974	\$14,133	\$117,791	\$0	\$0	\$1 59,898
--Total 4.2.05.05.02CHEM STOR. & PREP. - METALS					537		\$66,913	\$33,806	\$281,757	\$0	\$0	\$382,476
4.2.05.07.01CHEM LEACH-THERMAL & MOISTURE PROTECTION												
	ROOF	U.C. per SF					0	0	0	1.931	0	1.931
	ROOF INSULATION		29,697.00	SF	0		\$0	\$0	\$0	\$57,354	\$0	\$57,354
	ROOF	U.C. per SF					0	0	0	2.938	0	2.938
	ROOFING		29,697.00	SF	0		\$0	\$0	\$0	\$87,235	\$0	\$87,235
	STEEL	U.C. per SF			0.068	\$42.71	2.883	1.599	13.94	0	0	18.422
	SANDWICH WALL PANELS		92,691.00	SF	6,257	STEEL1	\$267,242	\$148,178	\$1,292,113	\$0	\$0	\$1,707,533
Subtotal							\$267,242	\$148,178	\$1,292,113	\$144,589	\$0	\$1,852,122
Sales Tax							\$0	\$0	\$77,527	\$0	\$0	\$77,527
INEEUSubcontractorOverheads							\$112,063	\$62,136	\$574,331	\$60,630	\$0	\$809,159
Subtotal Estimate												\$2,738,808
Escalation							\$71,575	\$39,686	\$366,827	\$38,725	\$0	\$516,813
Contingency							\$323,906	\$179,597	\$1,660,047	\$175,246	\$0	\$2,338,796
--Total 4.2.05.07.01CHEM LEACH-THERMAL & MOISTURE PROTECTION					6,257		\$774,785	\$429,597	\$3,970,844	\$419,190	\$0	\$5,594,416

DETAIL ITEM REPORT

Project Name: **OU 7-10 Staged Interim Action**
Stage III Project-Treatment-Max Treat with TD (Re-escalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
<u>4.2.05.07.02 CHEM STOR. & PREP. -THERMAL & MOISTURE PROTECTION</u>												
	ROOF INSULATION	ROOF	<i>U.C. per SF</i> 4,200.00	SF	0		0 \$0	0 \$0	0 \$0	1.931 \$8,111	0 \$0	1.931 \$8,111
	ROOFING	ROOF	<i>U.C. per SF</i> 4,200.00	SF	0		0 \$0	0 \$0	0 \$0	2.938 \$12,338	0 \$0	2.938 \$12,330
	SANDWICH WALL PANELS	STEEL	<i>U.C. per SF</i> 7,800.00	SF	0.068 527	\$42.71 STEEL1	2.883 \$22,489	1.599 \$12,469	13.94 \$108,732	0 \$0	0 \$0	18.422 \$143,690
Subtotal							\$22,489	\$12,469	\$108,732	\$20,449	\$0	\$164,139
Sales Tax							\$0	\$0	\$6,524	\$0	\$0	\$6,524
INEEUSubcontractorOverheads							41.93% \$9,430	\$5,229	\$48,330	\$8,575	\$0	\$71,564
Subtotal Estimate												\$242,227
Escalation							\$6,023	\$3,340	\$30,869	\$5,477	\$0	\$45,708
Contingency							\$27,257	\$15,113	\$139,694	\$24,785	\$0	\$206,849
—Total 4.2.05.07.02 CHEM STOR. & PREP. -THERMAL & MOISTURE PROTECTION					527		\$65,199	\$36,151	\$334,149	\$59,285	\$0	\$494,784

4.2.05.08.01 CHEM LEACH -DOORS & WINDOWS

	PERSONNEL DOORS 3'X7'	GEN	<i>U.C. per EA</i> 36.00	EA	6.885 248	\$35.81 CN-CARP	246.552 \$8,876	0 \$0	903.89 \$32,540	0 \$0	0 \$0	1150.442 \$41,416
	PERSONNEL DOORS 6'X7'	GEN	<i>U.C. per EA</i> 13.00	EA	14.58 190	\$35.81 CN-CARP	522.11 \$6,787	0 \$0	2089.37 \$27,162	0 \$0	0 \$0	2611.48 \$33,949
	8'X12' OH DOOR W/ MOTOR OPERATOR	GEN	<i>U.C. per EA</i> 5.00	EA	0		0 \$0	0 \$0	0 \$0	3643.75 \$18,219	0 \$0	3643.75 \$18,219

DETAIL ITEM REPORT

Project Name: **OU 7-70 Staged Interim Action**
Stage III Project-Treatment-Max Treat with TD (Re-escalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
4.2.05.08.01 CHEM LEACH- DOORS & WINDOWS												
	12'X12' OH DOOR W/ OPERATOR	GEN U.C. per EA	4.00	EA	0		0 \$0	0 \$0	0 \$0	4014.75 \$16,059	0 \$0	4014.75 \$16,059
							\$15,663	\$0	\$59,702	\$34,278	\$0	\$109,643
							\$0	\$0	\$3,582	\$0	\$0	\$3,582
							\$4,547	\$0	\$18,371	\$9,951	\$0	\$32,869
Subtotal Estimate												\$146,094
Escalation							\$3,814	\$0	\$15,408	\$8,346	\$0	\$27,568
Contingency							\$17,259	\$0	\$69,729	\$37,769	\$0	\$124,757
—Total 4.2.05.08.01 CHEM LEACH - DOORS & WINDOWS					437		\$41,283	\$0	\$166,793	\$90,343	\$0	\$298,419
4.2.05.08.02 CHEM STOR. & PREP. - DOORS & WINDOWS												
	PERSONNEL DOORS 3'X7'	GEN U.C. per EA	2.00	EA	6.885 14	\$35.81 CN-CARP	246.55 \$493	0 \$0	903.89 \$1,808	0 \$0	0 \$0	1150.44 \$2,301
	12'X12' OH DOOR W/ OPERATOR	GEN U.C. per EA	2.00	EA	0		0 \$0	0 \$0	0 \$0	4014.75 \$8,030	0 \$0	4014.75 \$8,030
							\$493	\$0	\$1,808	\$8,030	\$0	\$10,330
							\$0	\$0	\$108	\$0	\$0	\$108
							\$143	\$0	\$556	\$2,331	\$0	\$3,030
Subtotal Estimate												\$13,469
Escalation							\$120	\$0	\$467	\$1,955	\$0	\$2,542
Contingency							\$543	\$0	\$2,111	\$8,847	\$0	\$11,502
—Total 4.2.05.08.02 CHEM STOR. & PREP. - DOORS & WINDOWS					14		\$1,300	\$0	\$5,051	\$21,163	\$0	\$27,513
4.2.05.09.01 CHEM LEACH- FINISHES												
	EPOXY FLOOR COATING	PAINT U.C. per SF	48,039.00	SF	0.108 5,188	\$38.00 CN-PNTS	4.104 \$197,152	0 \$0	1.07 \$51,402	0 \$0	0 \$0	5.174 \$248,554

DETAIL ITEM REPORT

Project Name: *OU 7-70 Staged Interim Action*
Stage III Project-Treatment-Max Treat with TD (Re-escalated)
 Project Location: *INEEL-RWMC*
 Estimate Number: *5974-2 (4a+3aP)*

Client: *S. L. Austad*
 Prepared By: *R. D. Adams / S. N. Wasley*
 Estimate Type: *Project Support*

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
<u>4.2.05.09.01 CHEM LEACH - FINISHES</u>												
	AIRLOCK PARTITIONS	GEN										
		<i>U.C. per SF</i>										
			4,240.00	SF	0		\$0	\$0	\$0	\$8,480	\$0	\$8,480
Subtotal							\$197,152	\$0	\$51,402	\$8,480	\$0	\$257,034
Sales Tax							\$0	\$0	\$3,084	\$0	\$0	\$3,084
INEEUSubcontractorOverheads							\$82,672	\$0	\$22,848	\$2,462	\$0	\$107,981
Subtotal Estimate												\$368,099
Escalation							\$52,803	\$0	\$14,593	\$2,065	\$0	\$69,460
Continaency							\$238,955	\$0	\$66,039	\$9,344	\$0	\$314,337
—Total 4.2.05.09.01 CHEM LEACH - FINISHES					5,188		\$571,581	\$0	\$157,965	\$22,350	\$0	\$751,896

4.2.05.09.02 CHEM STOR. & PREP. - FINISHES

	EPOXY FLOOR COATING	PAINT										
		<i>U.C. per SF</i>										
			4,560.00	SF	0.108 492	\$38.00 CN-PNTS	4.104 \$18,714	0 \$0	1.07 \$4,879	0 \$0	0 \$0	5.174 \$23,593
Subtotal							\$18,714	\$0	\$4,879	\$0	\$0	\$23,593
Sales Tax							\$0	\$0	\$293	\$0	\$0	\$293
INEEUSubcontractorOverheads							\$7,847	\$0	\$2,169	\$0	\$0	\$10,016
Subtotal Estimate												\$33,902
Escalation							\$5,012	\$0	\$1,385	\$0	\$0	\$6,397
Contingency							\$22,682	\$0	\$6,269	\$0	\$0	\$28,951
--Total 4.2.05.09.02 CHEM STOR. & PREP. - FINISHES					492		\$54,256	\$0	\$14,994	\$0	\$0	\$69,251

4.2.05.11 CHEM-LEACH EQUIPMENT-INSTALLGFE

Memo: From "Plant Desgn and Economics for Chemical Engineers," the average installation costs are about 25% of purchase price. Due to the very *specialized* nature of some of these systems (and the very high system purchase prices), assume installation will be *one-half the average* or 72.5% of purchase price. This factor will only apply to the non-HVAC and non-I&C equipment. HVAC and I&C equipment Installation will be detailed separately.

	EQUIPMENT INSTALLATION	<i>U.C. per \$</i>										
			14,835,406.00	\$	0		\$1,854,426	\$0	\$0	\$0	\$0	\$1,854,426

DETAIL ITEM REPORT

Project Name: **OU 7-70 Staged Interim Action**
Stage III Project-Treatment-Max Treat with TD(Re-escalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
4.2.05.11 CHEM-LEACH EQUIPMENT-INSTALL GFE												
Memo: From "Plant Design and Economics for Chemical Engineers," the average Installation costs are about 25% of purchase price. Due to the very specialized nature of some of these systems (and the very high system purchase prices), assume Installation will be one-half the average or 12.5% of purchase price. This factor will only apply to the non-HVAC and non-I&C equipment. HVAC and I&C equipment installation will be detailed separately.												
	Subtotal						\$1,854,426	\$0	\$0	\$0	\$0	\$1,854,426
	Sales Tax						\$0	\$0	\$0	\$0	\$0	\$0
	INEEL Subcontractor Overheads	0.00%					\$0	\$0	\$0	\$0	\$0	\$0
	Subtotal Estimate											\$1,854,426
	Escalation						\$349,930	\$0	\$0	\$0	\$0	\$349,930
	Contingency						\$1,583,581	\$0	\$0	\$0	\$0	\$1,583,581
—Total 4.2.05.11 CHEM-LEACH EQUIPMENT-INSTALL GFE					0		\$3,707,937	\$0	\$0	\$0	\$0	\$3,707,937

4.2.05.15.01.01 CHEM LEACH HVAC

HVAC U.C. per EA AIR HANDLER, INCLUDING HEATING COIL (18,000 CFM)												
			4.00	EA	54	\$36.82	1988.28	0	0	0	0	1988.28
					216	CN-SHEE	\$7,953	\$0	\$0	\$0	\$0	\$7,953
Memo: Cost are based on Richardsons. 2000 (sec. 15-8).												
HVAC U.C. per EA HEPA FILTER HOUSING (6W X 3H X SINGLE PASS)												
			4.00	EA	140	\$36.82	5154.8	0	0	0	0	5154.8
					560	CN-SHEE	\$20,619	\$0	\$0	\$0	\$0	\$20,619
Memo: Costs are based on vendor information @ \$9,000/single pass/filter.												
HVAC U.C. per EA EXHAUST FAN 40 HP (18,000 CFM)												
			4.00	EA	80	\$36.82	2945.6	0	0	0	0	2945.6
					320	CN-SHEE	\$11,782	\$0	\$0	\$0	\$0	\$11,782
HVAC U.C. per EA AIR HANDLER, INCLUDING HEATING COIL (16,000 CFM)												
			2.00	EA	65	\$36.82	2393.3	0	0	0	0	2393.3
					130	CN-SHEE	\$4,787	\$0	\$0	\$0	\$0	\$4,787
Memo: Cost are based on Richardsons, 2000 (sec. 15-8).												
HVAC U.C. per EA HEPA FILTER HOUSING (5W X 3H X SINGLE PASS)												
			2.00	EA	120	\$36.82	4418.4	0	0	0	0	4418.4
					240	CN-SHEE	\$8,837	\$0	\$0	\$0	\$0	\$8,837
Memo: Costs are based on vendor information @ \$9,000/single pass/filter.												
HVAC U.C. per EA EXHAUST FAN 40 HP (16,000 CFM)												
			2.00	EA	60	\$36.82	2209.2	0	0	0	0	2209.2
					120	CN-SHEE	\$4,418	\$0	\$0	\$0	\$0	\$4,418

DETAIL ITEM REPORT

Project Name: **OU 7-70 Staged Interim Action**
Stage III Project-Treatment-Max Treat with TD (Re-escalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>EquiDment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
42.05.15.01.01	CHEM LEACH HVAC											
	HVAC	U.C. per EA			140	\$36.82	5154.8	0	0	0	0	5154.8
	HEPA FILTER HOUSING (6W X 3H X DOUBLE PASS)		4.00	EA	560	CN-SHEE	\$20,619	\$0	\$0	\$0	\$0	\$20,619
	Memo: Costs are based on vendor information @ \$15,000/double pasdfilter.											
	HVAC	U.C. per EA			60	\$36.82	2209.2	0	0	0	0	2209.2
	EXHAUST FAN 60 HP (18,000 CFM)		4.00	EA	240	CN-SHEE	\$8,837	\$0	\$0	\$0	\$0	\$8,837
	HVAC	U.C. per EA			160	\$36.82	5891.2	0	0	0	0	5891.2
	HEPA FILTER HOUSING (6W X 4H X DOUBLE PASS)		1.00	EA	160	CN-SHEE	\$5,891	\$0	\$0	\$0	\$0	\$5,891
	Memo: Costs are based on vendor information @ \$15,000/double pasdfilter.											
	HVAC	U.C. per EA			90	\$36.82	3313.8	0	0	0	0	3313.8
	EXHAUST FAN 75 HP (24,000 CFM)		1.00	EA	90	CN-SHEE	\$3,314	\$0	\$0	\$0	\$0	\$3,314
	HVAC	U.C. per EA			90	\$36.82	3313.8	0	0	0	0	3313.8
	HEPA FILTER HOUSING (3W X 3H X DOUBLE PASS)		1.00	EA	90	CN-SHEE	\$3,314	\$0	\$0	\$0	\$0	\$3,314
	Memo: Costs are based on vendor information @ \$15,000/double pasdfilter.											
	HVAC	U.C. per EA			60	\$36.82	2209.2	0	0	0	0	2209.2
	EXHAUST FAN 40 HP (9,000 CFM)		1.00	EA	60	CN-SHEE	\$2,209	\$0	\$0	\$0	\$0	\$2,209
	HVAC	U.C. per EA			24	\$36.82	883.68	0	0	0	0	883.68
	O. A. electric duct heater 400kw		6.00	EA	144	CN-SHEE	\$5,302	\$0	\$0	\$0	\$0	\$5,302
	Memo: Costs are based on RS Means, 2000 (sec. 5761 page 671).											
	HVAC	U.C. per EA			144	\$39.33	4090.32	0	0	0	0	4090.32
	Chiller, water cooled 350 kw		3.00	EA	312	CN-PIPE	\$12,271	\$0	\$0	\$0	\$0	\$12,271
	HVAC	U.C. per EA			42	\$39.33	1651.86	0	0	0	0	1651.86
	Chilled water pump (160 gpm)		3.00	EA	126	CN-PIPE	\$4,956	\$0	\$0	\$0	\$0	\$4,956
	HVAC	U.C. per EA			63	\$39.33	2477.79	0	0	0	0	2477.79
	Cooling water pump (420 gpm)		2.00	EA	126	CN-PIPE	\$4,956	\$0	\$0	\$0	\$0	\$4,956
	HVAC	U.C. per EA			68	\$39.33	2674.44	0	0	0	0	2674.44
	Cooling tower (1.3 Mw)		1.00	EA	68	CN-PIPE	\$2,674	\$0	\$0	\$0	\$0	\$2,674
	HVAC	U.C. per LBS			0.2	\$36.82	7.364	0.3	2	0	0	9.664
	STAINLESS STEEL DUCTWORK (based on 3 lbs/sf)		90,855.00	LBS	18.171	CN-SHEE	\$669,056	\$27,257	\$181,710	\$0	\$0	\$878,023

DETAIL ITEM REPORT

Project Name: **OU 7-10 Staged Interim Action**
Stage III Project-Treatment-Max Treat with TD (Re-escalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
4.2.05.15.01.01 CHEM LEACH HVAC												
	HVAC	<i>U.C. per LBS</i>			<i>0.08</i>	<i>\$36.82</i>	<i>2.946</i>	<i>0.3</i>	<i>0.75</i>	<i>0</i>	<i>0</i>	<i>3.996</i>
	GALVANIZED STEEL DUCTWORK (based on 3 lbs/sf)		90,855.00	LBS	7,268	CN-SHEE	\$267,622	\$27,257	\$68,141	\$0	\$0	5363,020
Subtotal							\$1,069,418	\$54,513	\$249,851	\$0	\$0	\$1,373,782
Sales Tax							\$0	\$0	\$14,991	\$0	\$0	\$14,991
INEEL/Subcontractor Overheads							\$488,035	\$24,877	\$120,862	\$0	\$0	\$633,775
Subtotal Estimate												\$2,022,548
Escalation							\$293,891	\$14,981	\$72,782	\$0	\$0	\$381,655
Contingency							\$1,329,982	\$67,795	\$329,371	\$0	\$0	\$1,727,148
—Total 4.2.05.15.01.01 CHEM LEACH HVAC					29,001		\$3,181,327	\$162,166	\$787,858	\$0	\$0	\$4,131,351

4.2.05.15.01.02 CHEM STOR. & PREP. HVAC

Memo: Costs are based on RS Means 2000 storage/ warehouse HVAC sq. ft.

	HVAC	<i>U.C. per SF</i>					<i>0</i>	<i>0</i>	<i>0</i>	<i>5.08</i>	<i>0</i>	<i>5.08</i>
	HVAC SYSTEM ALLOWANCE FOR CHEM LEACH STORAGE BUILDING		4,200.00	SF	0	CN-SHEE	\$0	\$0	\$0	\$21,336	\$0	\$21,336
Subtotal							\$0	\$0	\$0	\$21,336	\$0	\$21,336
Sales Tax							\$0	\$0	\$0	\$0	\$0	\$0
INEEL Subcontractor Overheads							\$0	\$0	\$0	\$9,737	\$0	\$9,737
Subtotal Estimate												\$31,073
Escalation							\$0	\$0	\$0	\$5,863	\$0	\$5,863
Contingency							\$0	\$0	\$0	\$26,535	\$0	\$26,535
—Total 4.2.05.15.01.02 CHEM STOR. & PREP. HVAC					0		\$0	\$0	\$0	\$63,471	\$0	\$63,471

4.2.05.15.02.01 CHEM LEACH FIRE PROTECTION

		<i>U.C. per SF</i>					<i>0</i>	<i>0</i>	<i>0</i>	<i>3.4</i>	<i>0</i>	<i>3.4</i>
	CL- FACILITY FIRE SYSTEM CONTROLS		30,285.00	SF	0		\$0	\$0	\$0	\$102,969	\$0	\$102,969

DETAIL ITEM REPORT

Project Name: **OU 7-70 Staged Interim Action**
Stage III Project-Treatment-Max Treat with TD(Re-escalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

Code	Description	Contractor	Qty	UOM	Hrs	Resource	Labor	Equipment	Material	Subcontractor	Other	TOTAL
<u>4.2.05.15.02.01 CHEM LEACH FIRE PROTECTION</u>												
	FP	<i>U.C. per SF</i>					0	0	0	3.65	0	3.65
	CL-DRY PIPE FIRE PROTECTION		30,285.00	SF	0	CN-SPRI	\$0	\$0	\$0	\$1 10,540	\$0	\$1 10,540
	FP	<i>U.C. per SF</i>					0	0	0	3.65	0	3.65
	CL-DRY PIPE FIRE PROTECTION(SECONDARY COVERAGE UNDER EQUIPMENT)		24,035.00	SF	0	CN-SPRI	\$0	\$0	\$0	\$87,728	\$0	\$87,728
	FP	<i>U.C. per LF</i>					0	0	0	65.3	0	65.3
	CL- FEED MAINS		500.00	LF	0	CN-SPRI	\$0	\$0	\$0	\$32,650	\$0	\$32,650
		<i>U.C. per LS</i>					0	0	0	100000	0	100000
	CL-EXTRA HAZARD FOAM SYSTEM (EQUIPMENT ONLY)		1.00	LS	0		\$0	\$0	\$0	\$100,000	\$0	\$100,000
		<i>U.C. per SF</i>					0	0	0	4.35	0	4.35
	CL-EXTRA HAZARD FOAM PIPING DISTRIBUTION SYSTEM		30,285.00	SF	0		\$0	\$0	\$0	\$131,740	\$0	\$131,740
		<i>U.C. per EA</i>					0	0	0	10000	0	10000
	CL-EXTRA HAZARD FOAM MONITOR NOZZLES		4.00	EA	0		\$0	\$0	\$0	\$40,000	\$0	\$40,000
		<i>U.C. per CF</i>					0	0	0	60.35	0	60.35
	CL-GLOVEBOX F.P. MIST SYSTEM		1,447.00	CF	0		\$0	\$0	\$0	\$87,326	\$0	\$87,326
Memo: Cost per cubic foot is based on the GEM facility glovebox fire protection misting system.												
Subtotal							\$0	\$0	\$0	\$692,953	\$0	\$692,953
Sales Tax							\$0	\$0	\$0	\$0	\$0	\$0
INEEL/Subcontractor Overheads							\$0	\$0	\$0	\$96,831	\$0	\$96,831
Subtotal Estimate												\$709,784
Escalation							\$0	\$0	\$0	\$149,032	\$0	\$1 49,032
Contingency							\$0	\$0	\$0	\$674,433	\$0	\$674,433
— Total 4.2.05.15.02.01 CHEM LEACH FIRE PROTECTION					0		\$0	\$0	\$0	\$1,613,250	\$0	\$1,613,250

4.2.05.15.02.02 CHEM STOR. & PREP. FIRE PROTECTION

		<i>U.C. per SF</i>					0	0	0	3.4	0	3.4
	CHEM STOR- FACILITY FIRE SYSTEM CONTROLS		4,200.00	SF	0		\$0	\$0	\$0	\$14,280	\$0	\$14,280

DETAIL ITEM REPORT

Project Name: **OU 7-70 Staged Interim Action**
Stage III Project-Treatment-Max Treat with TD (Re-escalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

Code	Description	Contractor	Qty	UOM	Hrs	Resource	Labor	Equipment	Material	Subcontractor	Other	TOTAL
4.2.05.15.02.02CHEM STOR. & PREP. FIRE PROTECTION												
		FP		U.C. per SF			0	0	0	3.65	0	3.65
	CHEM STOR-DRY PIPE FIRE PROTECTION		4,200.00	SF	0	CN-SPRI	\$0	\$0	\$0	\$15,330	\$0	\$15,330
		FP		U.C. per SF			0	0	0	3.65	0	3.65
	CHEM STOR-DRY PIPE FIRE PROTECTION (SECONDARY COVERAGE UNDER EQUIPMENT)		4,200.00	SF	0	CN-SPRI	\$0	\$0	\$0	\$15,330	\$0	\$15,330
		FP		U.C. per LF			0	0	0	65.3	0	65.3
	CHEM STOR- FEED MAINS		500.00	LF	0	CN-SPRI	\$0	\$0	\$0	\$32,650	\$0	\$32,650
Subtotal							\$0	\$0	\$0	\$77,590	\$0	\$77,590
Sales Tax							\$0	\$0	\$0	\$0	\$0	\$0
INEEL/Subcontractor Overheads							\$0	\$0	\$0	\$26,548	\$0	\$26,548
Subtotal Estimate												\$104,138
Escalation							\$0	\$0	\$0	\$19,651	\$0	\$19,651
Contingency							\$0	\$0	\$0	\$88,928	\$0	\$88,928
—Total 4.2.05.15.02.02CHEM STOR. & PREP. FIRE PROTECTION					0		\$0	\$0	\$0	\$212,717	\$0	\$212,717

4.2.05.15.03CHEM LEACH - PLANT AIR

Memo: Costs are based on the GEM Project design, assume the same type system and coverage will be required for this facility. Equipment cost for the compressor is by the retrieval project.

		U.C. per SF					0	0	0	2.04	0	2.04
	CHEM LEACH BLDG-PLANT AIR DIST. SYSTEM		30,285.00	SF	0		\$0	\$0	\$0	\$61,781	\$0	\$61,781
Subtotal							\$0	\$0	\$0	\$61,781	\$0	\$61,781
Sales Tax							\$0	\$0	\$0	\$0	\$0	\$0
INEEL Subcontractor Overheads							\$0	\$0	\$0	\$0	\$0	\$0
Subtotal Estimate												\$61,781
Escalation							\$0	\$0	\$0	\$11,658	\$0	\$11,658
Contingency							\$0	\$0	\$0	\$52,758	\$0	\$52,758
—Total 4.2.05.15.03CHEM LEACH - PLANT AIR					0		\$0	\$0	\$0	\$126,198	\$0	\$126,198

DETAIL ITEM REPORT

Project Name: ***OU 7-70 Staged Interim Action
Stage III Project-Treatment-Max Treat with TD (Re-escalated)***
Project Location: ***INEEL-RWMC***
Estimate Number: ***5974-2 (4a+3aP)***

Client: **S. L. Austad**
Prepared By: **R. D. Adams / S. N. Wasley**
Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
4.2.05.15.04 CHEM LEACH - BREATHING AIR												
Memo:	Costs are based on the GEM Project design, assume the same type system and coverage will be required for this facility. No costs for the breathing air compressor have been included, assume provided to the project by the BBWI equipment pool at no cost to this project.											
	CHEM LEACH BLDG-BREATHINGAIR DIST. SYSTEM		U.C. per SF 30,285.00	SF	0		\$0	\$0	\$0	11.2 \$339,192	\$0	112 \$339,192
	Subtotal						\$0	\$0	\$0	\$339,192	\$0	\$339,192
	Sales Tax						\$0	\$0	\$0	\$0	\$0	\$0
	INEEUSubcontractor Overheads		0.00%				\$0	\$0	\$0	\$0	\$0	\$0
	Subtotal Estimate											\$339,192
	Escalation						\$0	\$0	\$0	\$64,006	\$0	\$64,006
	Contingency						\$0	\$0	\$0	\$289,652	\$0	\$289,652
- Total	4.2.05.15.04CHEM LEACH - BREATHING AIR				0		\$0	\$0	\$0	\$692,849	\$0	\$692,849

4.2.05.15.05.1CHEM LEACH PROCESS PIPING

PIPE	U.C. per SF	0.182	\$39.33	7.158	0	32.7	0	0	39.858	
CL- PROCESS PIPING ALLOWANCE	30,285.00	SF	5,512	CN-PIPE	\$216,782	\$0	\$990,320	\$0	\$0	\$1,207,101
Subtotal					\$216,782	\$0	\$990,320	\$0	\$0	\$1,207,101
Sales Tax					\$0	\$0	\$59,419	\$0	\$0	\$59,419
INEEL/Subcontractor Overheads	48.10%				\$104,281	\$0	\$504,966	\$0	\$0	\$609,247
Subtotal Estimate										\$1,075,760
Escalation					\$60,585	\$0	\$293,373	\$0	\$0	\$353,957
Contingency					\$274,170	\$0	\$1,327,635	\$0	\$0	\$1,601,806
— Total	4.2.05.15.05.1	CHEM LEACH PROCESS PIPING	5,512		\$655,817	\$0	\$3,175,713	\$0	\$0	\$3,831,530

4.2.05.15.05.2 CHEM STOR. & PREP PROCESS PIPING

PIPE	U.C. perSF	0.182	\$39.33	7.158	0	32.7	0	0	39.858
CHEM STOR. PROCESS PIPING ALLOWANCE	4,200.00 SF	764	CN-PIPE	\$30,064	\$0	\$137,340	\$0	\$0	\$167,404

DETAIL ITEM REPORT

Project Name: **OU 7-10 Staged Interim Action**
Stage III Project-Treatment-Max Treat with TD(Reescalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
<u>4.2.05.15.05.2 CHEM STOR. & PREP PROCESS PIPING</u>												
	Subtotal						\$30,064	\$0	\$137,340	\$0	\$0	\$167,404
	Sales Tax						\$0	\$0	\$8,240	\$0	\$0	\$8,240
	INEEL/Subcontractor Overheads	48.10%					\$14,462	\$0	\$70,030	\$0	\$0	\$84,492
	Subtotal Estimate											\$260,136
	Escalation						\$8,402	\$0	\$40,686	\$0	\$0	\$49,088
	Continaencv						\$38,023	\$0	\$184,120	\$0	\$0	\$222,142
--Total 4.2.05.15.05.2 CHEM STOR. & PREP PROCESS PIPING					764		\$90,950	\$0	\$440,416	\$0	\$0	\$531,366

4.2.05.16.01.01 CHEM LEACH GENERAL FACILITIES ELECTRICAL

		<i>U.C. per SF</i>					0	0	0	17	0	17
	FACILITY RACEWAYS		30,285.00	SF	0		\$0	\$0	\$0	\$514,845	\$0	\$514,845
		<i>U.C. per SF</i>					0	0	0	6.36	0	6.36
	FACILITY WIRE & CABLE		30,285.00	SF	0		\$0	\$0	\$0	\$192,613	\$0	\$192,613
		<i>U.C. per SF</i>					0	0	0	8.75	0	8.75
	FACILITY LIGHTING		30,285.00	SF	0		\$0	\$0	\$0	\$264,994	\$0	\$264,994
		<i>U.C. per SF</i>					0	0	0	5.45	0	5.45
	FACILITY MISC. (TELEPHONE, LIGHTNING PROTECTION, ETC.)		30,285.00	SF	0		\$0	\$0	\$0	\$165,053	\$0	\$165,053
	Subtotal						\$0	\$0	\$0	\$1,137,505	\$0	\$1,137,505
	Sales Tax						\$0	\$0	\$0	\$0	\$0	\$0
	INEEL/Subcontractor Overheads	0.00%					\$0	\$0	\$0	\$0	\$0	\$0
	Subtotal Estimate						\$0	\$0	\$0	\$214,647	\$0	\$1,137,505
	Escalation						\$0	\$0	\$0	\$971,368	\$0	\$214,647
	Contingency						\$0	\$0	\$0		\$0	\$971,368
— Total 4.2.05.16.01.01 CHEM LEACH GENERAL FACILITIES ELECTRICAL					0		\$0	\$0	\$0	\$2,323,520	\$0	\$2,323,520

DETAIL ITEM REPORT

Project Name: **OU 7-10 Staged Interim Action**
Stage III Project-Treatment- Max Treat with TD (Re-escalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
<u>4.2.05.16.01.02 CHEM STOR. & PREP. GENERAL FACILITIES ELECTRICAL</u>												
	FACILITY RACEWAYS	<i>U.C. per SF</i>	4,200.00	SF	0		0 \$0	0 \$0	0 \$0	17 \$71,400	0 \$0	17 \$71,400
	FACILITY WIRE & CABLE	<i>U.C. per SF</i>	4,200.00	SF	0		0 \$0	0 \$0	0 \$0	6.36 \$26,712	0 \$0	6.36 \$26,712
	FACILITY LIGHTING	<i>U.C. per SF</i>	4,200.00	SF	0		0 \$0	0 \$0	0 \$0	8.75 \$36,750	0 \$0	8.75 \$36,750
	FACILITY MISC. (TELEPHONE, LIGHTNING PROTECTION, ETC.)	<i>U.C. per SF</i>	4,200.00	SF	0		0 \$0	0 \$0	0 \$0	5.45 \$22,890	0 \$0	5.45 \$22,890
Subtotal							\$0	\$0	\$0	\$157,752	\$0	\$157,752
Sales Tax							\$0	\$0	\$0	\$0	\$0	\$0
INEEUSubcontractor Overheads							\$0	\$0	\$0	\$0	\$0	\$0
Subtotal Estimate												\$157,752
Escalation							\$0	\$0	\$0	\$29,768	\$0	\$29,768
Contingency							\$0	\$0	\$0	\$134,712	\$0	\$134,712
—Total 4.2.05.16.01.02CHEM STOR. & PREP. GENERAL FACILITIES ELECTRICAL					0		\$0	\$0	\$0	\$322,232	\$0	\$322,232

4.2.05.16.03.01 CHEM LEACWCHEM STOR. MONITORING AND CONTROLS

Memo: Installation, raceways, and cabling @ 50% of I&C procurement cost.

I&C INSTALLATION, RACEWAYS, & CABLING	<i>U.C. per \$</i>	804,350.00	\$	0		0 \$0	0 \$0	0 \$0	0.5 \$402,175	0 \$0	0.5 \$402,175
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DETAIL ITEM REPORT

Project Name: **OU 7-10 Staged Interim Action**
Stage III Project-Treatment-Max Treat w/lt TD (Re-escalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
4.2.05.16.03.01CHEM LEACH/CHEM STOR. MONITORING AND CONTROLS												
Memo: Installation, raceways, and cabling @ 50% of I&C procurement cost.												
	Subtotal							\$0	\$0	\$0	\$402,175	\$402,175
	Sales Tax							\$0	\$0	\$0	\$0	\$0
	INEEUSubcontractorOverheads	0.00%						\$0	\$0	\$0	\$0	\$0
	Subtotal Estimate											\$402,175
	Escalation							\$0	\$0	\$75,890	\$0	\$75,890
	Contingency							\$0	\$0	\$343,436	\$0	\$343,436
— Total	4.2.05.16.03.01CHEM LEACWCHEM STOR. MONITORING AND CONTROLS				0			\$0	\$0	\$0	\$021,501	\$021,501

4.2.05.16.04.01 CHEM LEACH CRITICALITY & RAD MONITORING SYSTEMS INSTALLATION

	CRITICALITY SYSTEM INSTALLATION	<i>U.C. per EA</i>	3.00	EA	0			0	0	0	20185	20185
								\$0	\$0	\$0	\$60,555	\$60,555
Memo: Based on the GEM project installation costs for criticality equipment.												
	RADIOLOGICAL MONITORING EQUIPMENT INSTALLATION	<i>U.C. per IS</i>	1.00	LS	0			0	0	0	16349	16349
								\$0	\$0	\$0	\$16,349	\$16,349
	Subtotal							\$0	\$0	\$0	\$76,904	\$76,904
	Sales Tax							\$0	\$0	\$0	\$0	\$0
	INEEUSubcontractorOverheads	0.00%						\$0	\$0	\$0	\$0	\$0
	Subtotal Estimate											\$76,904
	Escalation							\$0	\$0	\$14,512	\$0	\$14,512
	Contingency							\$0	\$0	\$65,672	\$0	\$65,672
— Total	4.2.05.16.04.01CHEM LEACH CRITICALITY & RAD MONITORING SYSTEMS INSTALLATION				0			\$0	\$0	\$0	\$157,088	\$157,088

4.2.05.16.05.01CHEM LEACH CCTV MONITORING SYSTEM

	CCTV MONITORING SYSTEM-INSTALLATION LABOR	<i>U.C. per SF</i>	30,285.00	SF	0			0	0	0	1.36	1.36
								\$0	\$0	\$0	\$41,188	\$41,188
Memo: Unit costs are based on the GEM project. Camera equipment costs are included in the procurement WBS												

DETAIL ITEM REPORT

Project Name: **OU 7-70 Staged Interim Action**
Stage III Project-Treatment- Max Treat with TD (Re-escalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
<u>4.2.05.16.05.01 CHEM LEACH C C N MONITORING SYSTEM</u>												
	Subtotal						\$0	\$0	\$0	\$41,188	\$0	\$41,188
	Sales Tax						\$0	\$0	\$0	\$0	\$0	\$0
	INEEU Subcontractor Overheads	0.00%					\$0	\$0	\$0	\$0	\$0	\$0
	Subtotal Estimate						\$0	\$0	\$0	\$7,772	\$0	\$41,100
	Escalation						\$0	\$0	\$0	\$35,172	\$0	\$7,772
	Contingency						\$0	\$0	\$0	\$35,172	\$0	\$35,172
— Total 4.2.05.16.05.01 CHEM LEACH C C N MONITORING SYSTEM					0		\$0	\$0	\$0	\$04,132	\$0	\$84,132

4.2.06.01 AIR LOCK - GENERAL CONDITIONS

	SUPERVISION	GEN	<i>U.C. per HRS</i>		<i>0.12</i>	<i>\$40.00</i>	<i>4.8</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>4.8</i>
			25,272.00	HRS	3,033	CN-SUPR	\$121,306	\$0	\$0	\$0	\$0	9121,306
Memo: @ 12% of labor hrs.												
	Mobilization & Demobilization	GEN	<i>U.C. per \$</i>				<i>0</i>	<i>0</i>	<i>0</i>	<i>0.006</i>	<i>0</i>	<i>0.006</i>
			2,060,547.00	\$	0	CN-SKWK	\$0	\$0	\$0	\$12,363	\$0	\$12,363
Memo: Mobilization/demobilization costs @ .6% of direct construction\$.												
	CONSTRUCTION EQUIPMENT ALLOWANCE	GEN	<i>U.C. per HRS</i>				<i>0</i>	<i>4</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>4</i>
			25,272.00	HRS	0		\$0	\$101,088	\$0	\$0	\$0	\$101,088
Memo: @ \$2.50/LABOR HOUR.												
	SMALL TOOLS & CONSUMABLES	GEN	<i>U.C. per \$</i>				<i>0</i>	<i>0</i>	<i>0.04</i>	<i>0</i>	<i>0</i>	<i>0.04</i>
			1,027,484.00	\$	0		\$0	\$0	\$41,099	\$0	\$0	\$41,099
Memo: @ 4% of construction labor\$												
	GENERAL CLEANUP	GEN	<i>U.C. per HRS</i>		<i>0.08</i>	<i>\$31.58</i>	<i>2.526</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>2.526</i>
			25,272.00	HRS	2,022	CN-LABR	\$63,847	\$0	\$0	\$0	\$0	\$63,847
Memo: @ 8% of construction labor hours												
	CONDUCT OF OPERATIONS/CONDUCT OF MAINTENANCE	GEN	<i>U.C. per HRS</i>		<i>0.05</i>	<i>\$34.52</i>	<i>1.726</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>1.726</i>
			25,272.00	HRS	1,264	CN-SKWK	\$43,619	\$0	\$0	\$0	\$0	\$43,619
Memo: @ 5% of labor hours.												

DETAIL ITEM REPORT

Project Name: **OU 7-70 Staged Interim Action**
Stage III Project-Treatment-Max Treat with TD (Re-escalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
<u>4.2.06.01 AIR LOCK - GENERAL CONDITIONS</u>												
	GEN				80	\$34.20	2736	1250	0	0	0	3986
	Craning Allowance - W/ Operator & Oiler		26.00	Wk	2,080	CN-ENGR	\$71,136	\$32,500	\$0	50	\$0	\$1,03,636
<hr/>												
	Subtotal						\$299,908	\$1,33,588	\$41,099	\$12,363	\$0	\$486,959
	Sales Tax						\$0	\$0	\$2,466	50	\$0	\$2,466
	INEEL/Subcontractor Overheads	29.03%					\$87,063	\$38,781	\$12,647	53.589	\$0	\$142,080
<hr/>												
	Subtotal Estimate											\$631,505
	Escalation						573,022	532,526	510,607	\$3,010	\$0	\$1,19,165
	Contingency						5330,453	\$147,194	\$48,002	\$13,622	\$0	\$539,272
<hr/>												
— Total	4.2.06.01 AIR LOCK - GENERAL CONDITIONS				8,398		\$790,446	\$352,088	\$114,822	\$32,585	\$0	\$1,289,941
<hr/>												
<u>4.2.06.02 AIR LOCK - SITEWORK</u>												
	DIRT						0	0	0	4	0	4
	SF COST FROM RETRIEVAL PORTION		3,860.00	SF	0		\$0	\$0	50	515,440	\$0	\$15,440
<hr/>												
	Subtotal						\$0	\$0	50	\$15,440	\$0	\$15,440
	Sales Tax						\$0	\$0	50	\$0	\$0	\$0
	INEEL/Subcontractor Overheads	41.93%					\$0	50	\$0	\$6,474	\$0	\$6,474
<hr/>												
	Subtotal Estimate											\$21,914
	Escalation						\$0	\$0	50	\$4,135	\$0	\$4,135
	Contingency						\$0	\$0	\$0	\$18,714	\$0	\$18,714
<hr/>												
— Total	4.2.06.02 AIR LOCK - SITEWORK				0		\$0	\$0	\$0	\$44,763	\$0	\$44,763
<hr/>												
<u>4.2.06.03 AIR LOCK - CONCRETE</u>												
	GEN						0	0	0	16.28	0	16.28
	SF COST FROM RETRIEVAL PORTION		3,860.00	SF	0		\$0	\$0	50	\$62,841	50	\$62,841

DETAIL ITEM REPORT

Project Name: **OU 7-10 Staged Interim Action**
Stage III Project-Treatment-Max Treat with TD (Reescalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
4.2.06.03 AIR LOCK - CONCRETE												
	Subtotal						\$0	\$0	\$0	\$62,841	\$0	\$62,841
	Sales Tax						\$0	\$0	\$0	\$0	\$0	\$0
	INEEL/Subcontractor Overheads	29.03%					\$0	\$0	\$0	\$18,243	\$0	\$18,243
	Subtotal Estimate											\$81,083
	Escalation						\$0	\$0	\$0	\$15,300	\$0	\$15,300
	Contingency						\$0	\$0	\$0	\$69,241	\$0	\$69,241
--Total 4.2.06.03 AIR LOCK - CONCRETE					0		\$0	\$0	\$0	\$165,625	\$0	5165,625

4.2.06.05 AIR LOCK - METALS

	STEEL	U.C. per SF			2	\$43.62	87.24	5.538	21	0	0	113.778
	SF COST FROM RETRIEVAL PORTION		3,860.00	SF	7,720	E4	\$336,746	\$21,375	\$81,060	\$0	\$0	\$439,181
	Subtotal						\$336,746	\$21,375	\$81,060	\$0	\$0	\$439,181
	Sales Tax						\$0	\$0	\$4,864	\$0	\$0	\$4,664
	INEEL/Subcontractor Overheads	41.93%					\$141,208	\$8,963	\$36,030	\$0	\$0	\$186,201
	Subtotal Estimate											\$630,246
	Escalation						\$90,190	\$5,725	\$23,013	\$0	\$0	\$118,927
	Contingency						\$408,147	\$25,907	\$104,142	\$0	\$0	\$538,197
--Total 4.2.06.05 AIR LOCK - METALS					7,720		\$976,292	\$61,969	\$249,109	\$0	\$0	\$1,287,370

4.2.06.09 AIR LOCK - FINISHES

	SF COST FROM RETRIEVAL PORTION	U.C. per SF	3,860.00	SF	0		0	0	0	3.5	0	3.5
							\$0	\$0	\$0	\$13,510	\$0	\$13,510

DETAIL ITEM REPORT

Project Name: **OU 7-10 Staged Interim Action**
Stage III Project-Treatment-Max Treat with TD (Re-escalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
<u>4.2.06.09 AIR LOCK - FINISHES</u>												
	Subtotal						\$0	\$0	\$0	\$13,510	\$0	\$13,510
	Sales Tax						\$0	\$0	\$0	\$0	\$0	\$0
	INEEUSubcontractor Overheads	0.00%					\$0	\$0	\$0	\$0	\$0	\$0
	Subtotal Estimate											\$13,510
	Escalation						\$0	\$0	\$0	\$2,549	\$0	\$2,549
	Contingency						\$0	\$0	\$0	\$11,537	\$0	\$11,537
--- Total 4.2.06.09 AIR LOCK - FINISHES					0		\$0	\$0	\$0	\$27,596	\$0	\$27,596

4.2.06.13 AIR LOCK - SPECIAL CONSTRUCTION

		<i>U.C. per SF</i>					0	0	30	12.6	0	42.6
	ERECT-AIRLOCK CHARACTERIZATION STRUCTURE- FRAME, FABRIC		3,860.00	SF	0		\$0	\$0	\$115,800	\$48,636	\$0	\$164,436
		<i>U.C. per SF</i>					0	0	0	140.97	0	140.97
	ERECT- PERSONNEL AIRLOCK STRUCTURE		3,860.00	SF	0		\$0	\$0	\$0	\$544,144	\$0	\$544,144
	Subtotal						\$0	\$0	\$115,800	\$592,780	\$0	\$708,580
	Sales Tax						\$0	\$0	\$6,948	\$0	\$0	\$6,948
	INEEUSubcontractor Overheads	0.00%					\$0	\$0	\$0	\$0	\$0	\$0
	Subtotal Estimate											\$715,528
	Escalation						\$0	\$0	\$23,163	\$111,858	\$0	\$135,020
	Contingency						\$0	\$0	\$104,820	\$506,203	\$0	\$611,023
---Total 4.2.06.13 AIR LOCK - SPECIAL CONSTRUCTION					0		\$0	\$0	\$250,731	\$1,210,041	\$0	\$1,461,571

4.2.06.15.01 AIR LOCK -HVAC

	HVAC	<i>U.C. per LBS</i>			0.2	\$36.82	7.364	0.3	2	0	0	9.664
	STAINLESS STEEL DUCTWORK (based on 3 lbs/sf)		12,750.00	LBS	2,550	CN-SHEE	\$93,891	\$3,825	\$25,500	\$0	\$0	\$123,216

DETAIL ITEM REPORT

Project Name: **OU 7-70 Staged Interim Action**
Stage III Project-Treatment- Max Treat with TD (Re-escalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
<u>4.2.06.15.01 AIR LOCK - HVAC</u>												
	HVAC	<i>U.C. per LBS</i>			<i>0.08</i>	<i>\$36.82</i>	<i>2.946</i>	<i>0.3</i>	<i>0.75</i>	<i>0</i>	<i>0</i>	<i>3.996</i>
	GALVANIZED STEEL DUCTWORK (based on 3 lbs/sf)		12,750.00	LBS	1,020	CN-SHEE	\$37,556	\$3,825	\$9,563	\$0	\$0	\$50,944
Subtotal							\$131,447	\$7,650	\$35,063	\$0	\$0	\$174,160
Sales Tax							\$0	\$0	\$2,104	\$0	\$0	\$2,104
INEEL/Subcontractor Overheads							\$59,987	\$3,491	\$16,961	\$0	\$0	\$80,439
Subtotal Estimate												\$256,703
Escalation							\$36,124	\$2,102	\$10,214	\$0	\$0	\$48,440
Contingency							\$163,475	\$9,514	\$46,222	\$0	\$0	\$219,210
--Total 4.2.06.15.01 AIR LOCK - HVAC					3,570		\$391,032	\$22,757	\$110,563	\$0	\$0	5524,353

4.2.06.15.02 AIR LOCK - FIRE PROTECTION

Memo: Costs are based on contacting a local fire protection vendor that has provided many hours of time as a consultant for the INEEL. This company has also design and installed many fire protection systems at the INEEL, as well as the **GEM** project. Fire system control costs are based on the **GEM** Project design, assume the same type system and coverage will be required for this facility.

		<i>U.C. per SF</i>					<i>0</i>	<i>0</i>	<i>0</i>	<i>3.4</i>	<i>0</i>	<i>3.4</i>
AIRLOCK TO CHARACTERIZATION STRUCTURE FIRE SYSTEM CONTROLS			4,250.00	SF	0		\$0	\$0	\$0	\$14,450	\$0	\$14,450
	FP	<i>U.C. per SF</i>					<i>0</i>	<i>0</i>	<i>0</i>	<i>3.65</i>	<i>0</i>	<i>3.65</i>
CHARACTERIZATION AIRLOCK STRUCTURE-DRY PIPE FIRE PROTECTION			4,250.00	SF	0	CN-SPRI	\$0	\$0	\$0	\$15,513	\$0	\$15,513

DETAIL ITEM REPORT

Project Name: **OU 7-10 Staged Interlm Action**
Stage iii Project-Treatment-Max Treat with TD (Re-escalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
4.2.06.15.02 AIR LOCK - FIRE PROTECTION												
Memo: Costs are based on contacting a local fire protection vendor that has provided many hours of time as a consultant for the INEEL. This company has also design and installed many fire protection systems at the INEEL, as well as the GEM project. Fire system control costs are based on the GEM Project design, assume the same type system and coverage will be required for this facility.												
	FP											
	CHARACTERIZATION AIRLOCK- FEED MAINS	U.C. per LF	100.00	LF	0	CN-SPRI	\$0	\$0	\$0	65.3	0	65.3
							\$0	\$0	\$0	\$6,530	\$0	\$6,530
Subtotal							\$0	\$0	\$0	\$36,493	\$0	\$36,493
Sales Tax							\$0	\$0	\$0	\$0	\$0	\$0
INEEL Subcontractor Overheads							\$0	\$0	\$0	\$9,243	\$0	\$9,243
Subtotal Estimate												\$45,736
Escalation							\$0	\$0	\$0	\$8,630	\$0	\$8,630
Contingency							\$0	\$0	\$0	\$39,056	\$0	\$39,056
--Total 4.2.06.15.02 AIR LOCK - FIRE PROTECTION					0		\$0	\$0	\$0	\$93,422	\$0	\$93,422

4.2.06.15.03 AIR LOCK - PLANT AIR

Memo: Costs are based on the GEM Project design, assume the same type system and coverage will be required for this facility. Equipment cost for the compressor is by the retrieval project.

		U.C. per SF										
	AIRLOCK TO CHARACTERIZATION-PLANT AIR DIST. SYSTEM	4,250.00	SF	0			\$0	\$0	\$0	2.04	0	2.04
							\$0	\$0	\$0	\$8,670	\$0	\$8,670
Subtotal							\$0	\$0	\$0	\$8,670	\$0	\$8,670
Sales Tax							\$0	\$0	\$0	\$0	\$0	\$0
INEEL/Subcontractor Overheads							\$0	\$0	\$0	\$0	\$0	\$0
Subtotal Estimate							\$0	\$0	\$0	\$1,636	\$0	\$8,670
Escalation							\$0	\$0	\$0	\$7,404	\$0	\$1,636
Contingency							\$0	\$0	\$0		\$0	\$7,404
—Total 4.2.06.15.03 AIR LOCK - PLANT AIR					0		\$0	\$0	\$0	\$17,710	\$0	\$17,710

DETAIL ITEM REPORT

Project Name: **OU 7-70 Staged Interim Action**
Stage III Project-Treatment-Max Treat with TD(Reescalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>EquiDment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
4.2.06.15.04 AIR LOCK - BREATHING AIR												
Memo: Costs are based on the GEM Project design. assume the same type system and coverage will be required for this facility. No costs for the breathing air compressor have been included, assume provided to the project by the BBWI equipment pool at no cost to this project.												
	AIRLOCK TO CHARACTERIZATION-BREATHING AIR DIST. SYSTEM		4,250.00		0		\$0	\$0	\$0	\$47,600	\$0	\$47,600
	Subtotal						\$0	\$0	\$0	\$47,600	\$0	\$47,600
	Sales Tax						\$0	\$0	\$0	\$0	\$0	\$0
	INEEUSubcontractor Overheads	0.00%					\$0	\$0	\$0	\$0	\$0	\$0
	Subtotal Estimate						\$0	\$0	\$0	\$8,982	\$0	\$8,982
	Escalation						\$0	\$0	\$0	\$40,648	\$0	\$40,648
	Continaency						\$0	\$0	\$0	\$0	\$0	\$0
--Total 4.2.06.15.04AIR LOCK - BREATHING AIR					0		\$0	\$0	\$0	\$97,230	\$0	\$97,230

4.2.06.16.01AIR LOCK - GENERAL FACILITIES ELECTRICAL

Memo: Costs are based on the GEM project calculated square footage.

	FACILITY RACEWAYS	U.C. per SF	4,250.00 SF	0		\$0	\$0	\$0	\$72,250	\$0	\$72,250
	FACILITY WIRE & CABLE	U.C. per SF	4,250.00 SF	0		\$0	\$0	\$0	\$27,030	\$0	\$27,030
	FACILITY LIGHTING	U.C. per SF	4,250.00 SF	0		\$0	\$0	\$0	\$37,188	\$0	\$37,188

DETAIL ITEM REPORT

Project Name: **OU 7-70 Staged Interim Action**
Stage III Project-Treatment-Max Treat with TD (Reescalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
4.2.06.16.01AIR LOCK-GENERAL FACILITIES ELECTRICAL												
Memo: Costs are based on the GEM project calculated square footage.												
	FACILITY MISC. (TELEPHONE, LIGHTNING PROTECTION, ETC.)	U.C. per SF	4,250.00	SF	0		\$0	\$0	\$0	5.45	\$0	\$23,163
												\$23,163
Subtotal							\$0	\$0	\$0	\$159,630	\$0	\$159,630
Sales Tax							\$0	\$0	\$0	\$0	\$0	\$0
INEEL/Subcontractor Overheads							\$0	\$0	\$0	\$0	\$0	\$0
Subtotal Estimate												\$159,630
Escalation							\$0	\$0	\$0	\$30,122	\$0	\$30,122
Contingency							\$0	\$0	\$0	\$136,316	\$0	\$136,316
— Total 4.2.06.16.01AIR LOCK - GENERAL FACILITIES ELECTRICAL					0		\$0	\$0	\$0	\$326,068	\$0	\$326,068

4.2.06.16.03AIR LOCK - MONITORING AND CONTROLS

Memo: Unit costs are based on the GEM project calculated square footage. This unit cost also included HVAC controls.

	MONITORING AND CONTROLS-INSTRUMENTATION (BASED ON THE GEM PROJECT SF)	U.C. per SF	4,250.00	SF	0		\$0	\$0	\$0	5.9	\$0	\$25,075
												\$25,075
	MONITORING AND CONTROLS-CABLES (BASED ON THE GEM PROJECT SF)	U.C. per SF	4,250.00	SF	0		\$0	\$0	\$0	1.5	\$0	\$6,375
												\$6,375

Memo: Unit costs were adjusted down by 50% from the GEM project due to the economy of scale.

DETAIL ITEM REPORT

Project Name: **OU 7-10 Staged Interim Action**
Stage III Project-Treatment- Max Treat with TD (Reescalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

<u>Code</u>	<u>DescriDtion</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
4.2.06.16.03 AIR LOCK - MONITORING AND CONTROLS												
<i>Memo: Unit costs are based on the GEM project calculated square footage. This unit cost also included HVAC controls.</i>												
	MONITORING AND CONTROLS-RACEWAYS (BASED ON THE GEM PROJECT SF)	<i>U.C. per SF</i>	4,250.00	SF	0		\$0	\$0	\$0	1.45	\$0	1.45
										\$6,163		\$6,163
<i>Memo: Unit costs were adjusted down by 50% from the GEM project due to the economy of scale.</i>												
Subtotal							\$0	\$0	\$0	\$37,613	\$0	\$37,613
Sales Tax							\$0	\$0	\$0	\$0	\$0	\$0
INEEL/Subcontractor Overheads							\$0	\$0	\$0	\$0	\$0	\$0
Subtotal Estimate							\$0	\$0	\$0	\$7,097	\$0	\$7,097
Escalation							\$0	\$0	\$0	\$32,119	\$0	\$32,119
Contingency												
— Total 4.2.06.16.03 AIR LOCK - MONITORING AND CONTROLS					0		\$0	\$0	\$0	\$76,829	\$0	\$76,829
4.2.06.16.04 AIR LOCK - CRITICALITY & RAD MONITORING SYSTEMS INSTALLATION												
	CRITICALITY SYSTEM INSTALLATION	<i>U.C. per EA</i>	1.00	EA	0		\$0	\$0	\$0	20185	\$0	20185
										\$20,185		\$20,185
<i>Memo: Based on the GEM project installation costs for criticality equipment.</i>												
	RADIOLOGICAL MONITORING EQUIPMENT INSTALLATION	<i>U.C. per LS</i>	1.00	LS	0		\$0	\$0	\$0	16349	\$0	16349
										\$16,349		\$16,349
Subtotal							\$0	\$0	\$0	\$36,534	\$0	\$36,534
Sales Tax							\$0	\$0	\$0	\$0	\$0	\$0
INEEL/Subcontractor Overheads							\$0	\$0	\$0	\$0	\$0	\$0
Subtotal Estimate							\$0	\$0	\$0	\$6,894	\$0	\$6,894
Escalation							\$0	\$0	\$0	\$31,198	\$0	\$31,198
Contingency												
— Total 4.2.06.16.04 AIR LOCK - CRITICALITY & RAD MONITORING SYSTEMS INSTALLATION					0		\$0	\$0	\$0	\$74,626	\$0	\$74,626

DETAIL ITEM REPORT

Project Name: **OU 7-70 Staged Interim Action**
Stage III Project-Treatment-Max Treat w/lt TD (Re-escalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
4.2.06.16.05 AIR LOCK - CCTV MONITORING SYSTEM												
Memo: Costs are based on the GEM project calculated square footage.												
		<i>U.C. per SF</i>					<i>0</i>	<i>0</i>	<i>0</i>	<i>1.36</i>	<i>0</i>	<i>1.36</i>
	CCTV MONITORING SYSTEM-INSTALLATION LABOR		4,250.00	SF	0		\$0	\$0	\$0	\$5,780	\$0	\$5,780
Memo: Unit costs are based on the GEM project. Camera equipment costs are included in the procurement WBS												
Subtotal							\$0	\$0	\$0	\$5,780	\$0	\$5,780
Sales Tax							\$0	\$0	\$0	\$0	\$0	\$0
INEEL/Subcontractor Overheads							\$0	\$0	\$0	\$0	\$0	\$0
Subtotal Estimate												\$5,780
Escalation							\$0	\$0	\$0	\$1,091	\$0	\$1,091
Contingency							\$0	\$0	\$0	\$4,936	\$0	\$4,936
--Total 4.2.06.16.05 AIR LOCK - CCTV MONITORING SYSTEM					0		\$0	\$0	\$0	\$11,806	\$0	\$11,806

4.2.07 OFFICE/RESTROOM AREAS

Memo: Office area costs are based on historical costs of three office buildings constructed at the INEEL. The three building are CFA Training Facility(5000 sf), TRA 678 office building(5000 sf), and ICPP Ops Training Facility CPP 1651. Estimate file contains historical back-up information.

OFFICE AREAS		<i>U.C. per SF</i>	1,400.00	SF	0		<i>0</i>	<i>0</i>	<i>0</i>	<i>178.13</i>	<i>0</i>	<i>178.13</i>
							\$0	\$0	\$0	\$249,382	\$0	\$249,382
RESTROOM 30 X 60		<i>U.C. per SF</i>	1,800.00	SF	0		<i>0</i>	<i>0</i>	<i>0</i>	<i>143.73</i>	<i>0</i>	<i>143.73</i>
							\$0	\$0	\$0	\$258,714	\$0	\$258,714
Memo: Unit costs for this pre-engineered metal building is based on historical cost of a facility erected at the RWMC area in 1996, the RWMC Maintenance Facility The reflected unit cost includes slab on grade, building structure, mechanical, and electrical. The estimate file contains the historical cost data sheet.												
WATER CLOSETS	PIPE	<i>U.C. per EA</i>	8.00	EA	0	CN-PIPE	<i>0</i>	<i>0</i>	<i>0</i>	<i>1250</i>	<i>0</i>	<i>1250</i>
							\$0	\$0	\$0	\$10,000	\$0	\$10,000
URINALS	PIPE	<i>U.C. per EA</i>	3.00	EA	0	CN-PIPE	<i>0</i>	<i>0</i>	<i>0</i>	<i>750</i>	<i>0</i>	<i>750</i>
							\$0	\$0	\$0	\$2,250	\$0	\$2,250
LAVATORIES	PIPE	<i>U.C. per EA</i>	5.00	EA	0	CN-PIPE	<i>0</i>	<i>0</i>	<i>0</i>	<i>650</i>	<i>0</i>	<i>650</i>
							\$0	\$0	\$0	\$3,250	\$0	\$3,250
SHOWERS	PIPE	<i>U.C. per EA</i>	8.00	EA	0	CN-PIPE	<i>0</i>	<i>0</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>1000</i>
							\$0	\$0	\$0	\$8,000	\$0	\$8,000

DETAIL ITEM REPORT

Project Name: **OU 7-10 Staged Interim Action**
Stage III Project-Treatment-Max Treat with TD (Re-escalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
4.2.07 OFFICE/RESTROOM AREAS												
Memo: Office area costs are based on historical costs of three office buildings constructed at the INEEL. The three buildings are CFA Training Facility (5000 sf), TRA 678 office building (5000 sf), and ICPP Ops Training Facility CPP 1651. Estimate file contains historical back-up information.												
	WATER COOLER	PIPE	U.C. per EA	1.00	EA	0	CN-PIPE	0	0	0	990	990
								\$0	\$0	\$0	\$990	\$990
	LOCKERS	PIPE	U.C. per EA	80.00	EA	0	CN-PIPE	0	0	0	30	30
								\$0	\$0	\$0	\$2,400	\$2,400
Subtotal								\$0	\$0	\$0	\$534,986	\$534,986
Sales Tax								\$0	\$0	\$0	\$0	\$0
INEEL/Subcontractor Overheads								\$0	\$0	\$0	\$12,935	\$12,935
Subtotal Estimate												\$547,921
Escalation								\$0	\$0	\$0	\$103,393	\$103,393
Contingency								\$0	\$0	\$0	\$467,895	\$467,895
--Total 4.2.07 OFFICE/RESTROOM AREAS						0		\$0	\$0	\$0	\$1,119,209	\$1,119,209

6.1 TESTING AND TURNOVER PLANNING

Memo: Percentage allowances derived by the project team on the CSIX/TRUE Grout Feasibility Study, produced by Washington Group International, December, 2000. These percentages were increased to account for the complexity of this option.

	TESTING & TURNOVER PLANNING	U.C. per \$	140,235,135.00	\$	0			0	0	0	0	0.003	0.003
								\$0	\$0	\$0	\$0	\$392,658	\$392,658
Subtotal								\$0	\$0	\$0	\$0	\$392,658	\$392,658
Sales Tax								\$0	\$0	\$0	\$0	\$0	\$0
INEEL Subcontractor Overheads								\$0	\$0	\$0	\$0	\$0	\$0
Subtotal Estimate													\$392,658
Escalation								\$0	\$0	\$0	\$0	\$108,492	\$108,492
Contingency								\$0	\$0	\$0	\$0	\$489,232	\$489,232
--Total 6.1 TESTING AND TURNOVER PLANNING						0		\$0	\$0	\$0	\$0	\$990,382	\$990,382

DETAIL ITEM REPORT

Project Name: OU 7-70 Staged interim Action
 Stage III Project-Treatment-Max Treat with TD (Re-escalated)
 Project Location: INEEL-RWMC
 Estimate Number: 5974-2 (4a+3aP)

Client: S. L. Austad
 Prepared By: R. D. Adams / S. N. Wasiey
 Estimate Type: Project Support

Code	Description	Contractor	Qty	UOM	Hrs	Resource	Labor	Equipment	Material	Subcontractor	Other	TOTAL
6.2.01 S. O. TESTING												
	S. O. TESTING					U.C. per \$						
			140,235,135.00		0		\$0	\$0	\$0	\$0	\$5,889,876	\$5,889,876
	Subtotal						\$0	\$0	\$0	\$0	\$5,889,876	\$5,889,876
	Sales Tax						\$0	\$0	\$0	\$0	\$0	\$0
	INEEL/Subcontractor Overheads					0.00%	\$0	\$0	\$0	\$0	\$0	\$0
	Subtotal Estimate						\$0	\$0	\$0	\$0		\$5,009,076
	Escalation						\$0	\$0	\$0	\$0	\$1,627,373	\$1,627,373
	Contingency						\$0	\$0	\$0	\$0	\$7,338,478	\$7,330,478
—Total 6.2.01 S. O. TESTING					0		\$0	\$0	\$0	\$0	\$14,055,726	\$14,055,726

52.02 TRIAL BURN

BURN TEST. SAMPLE CREW	U.C. per LOT	1.00	LOT	0			\$0	\$0	\$0	200000	0	200000
							\$0	\$0	\$0	\$200,000	\$0	\$200,000
BURN TEST • OPERATORS BBWI-A	U.C. per LOT	1.00	LOT	4725	\$52.05	245940.75		0	0	0	0	245940.75
				4,725	T21	\$245,941	\$0	\$0	\$0	\$0	\$0	\$245,941
BURN TEST - FUEL	U.C. per LOT	1.00	LOT	0			\$0	\$0	100000	0	0	100000
							\$0	\$0	\$100,000	\$0	\$0	\$100,000
PARTICULATES (IN LIQUIDS)	U.C. per TESTS	15.00	TESTS	0			\$12,000	\$0	0	0	0	800
							\$12,000	\$0	\$0	\$0	\$0	\$12,000
DENSITY	U.C. per TESTS	6.00	TESTS	0			\$4,800	\$0	0	0	0	800
							\$4,800	\$0	\$0	\$0	\$0	\$4,800
HEAT OF COMBUSTION	U.C. per TESTS	3.00	TESTS	0			\$9,000	\$0	0	0	0	3000
							\$9,000	\$0	\$0	\$0	\$0	\$9,000
TOTAL CHLORINE	U.C. per TESTS	6.00	TESTS	0			\$12,000	\$0	0	0	0	2000
							\$12,000	\$0	\$0	\$0	\$0	\$12,000

DETAIL ITEM REPORT

Project Name: *OU 7-10 Staged Interim Action*
Stage III Project-Treatment-Max Treat with TD (Re-escalated)
 Project Location: *INEEL-RWMC*
 Estimate Number: *5974-2 (4a+3aP)*

Client: *S. L. Austad*
 Prepared By: *R. D. Adams / S. N. Wasley*
 Estimate Type: *Project Support*

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
6.2.02 TRIAL BURN												
	TOTAL ORGANIC HALOGENS					<i>U.C. per TESTS</i>						
			6.00	TESTS	0		3000 \$18,000	0 \$0	0 \$0	0 \$0	0 \$0	3000 \$18,000
	VISCOSITY					<i>U.C. per TESTS</i>						
			6.00	TESTS	0		800 \$4,800	0 \$0	0 \$0	0 \$0	0 \$0	800 \$4,800
	ICP METALS					<i>U.C. per TESTS</i>						
			18.00	TESTS	0		9000 \$162,000	0 \$0	0 \$0	0 \$0	0 \$0	9000 \$162,000
	MERCURY					<i>U.C. per TESTS</i>						
			18.00	TESTS	0		3000 \$54,000	0 \$0	0 \$0	0 \$0	0 \$0	3000 \$54,000
	TSS					<i>U.C. per TESTS</i>						
			12.00	TESTS	0		1000 \$12,000	0 \$0	0 \$0	0 \$0	0 \$0	1000 \$12,000
	TDS					<i>U.C. per TESTS</i>						
			12.00	TESTS	0		1000 \$12,000	0 \$0	0 \$0	0 \$0	0 \$0	1000 \$12,000
	TOC					<i>U.C. per TESTS</i>						
			12.00	TESTS	0		2000 \$24,000	0 \$0	0 \$0	0 \$0	0 \$0	2000 \$24,000
	pH					<i>U.C. per TESTS</i>						
			12.00	TESTS	0		1000 \$12,000	0 \$0	0 \$0	0 \$0	0 \$0	1000 \$12,000
	HALOGENS					<i>U.C. per TESTS</i>						
			12.00	TESTS	0		2000 \$24,000	0 \$0	0 \$0	0 \$0	0 \$0	2000 \$24,000
	PCB					<i>U.C. per TESTS</i>						
			18.00	TESTS	0		5000 \$90,000	0 \$0	0 \$0	0 \$0	0 \$0	5000 \$90,000
	TCLP					<i>U.C. per TESTS</i>						
			18.00	TESTS	0		30000 \$540,000	0 \$0	0 \$0	0 \$0	0 \$0	30000 \$540,000
	DIOXINS AND FURANS					<i>U.C. per TESTS</i>						
			12.00	TESTS	0		5000 \$60,000	0 \$0	0 \$0	0 \$0	0 \$0	5000 \$60,000
	PARTICULATES(IN GASES)					<i>U.C. per TESTS</i>						
			24.00	TESTS	0		1000 \$24,000	0 \$0	0 \$0	0 \$0	0 \$0	1000 \$24,000

DETAIL ITEM REPORT

Project Name: **OU 7-10 Staged Interim Action**
Stage III Project-Treatment- Max Treat with TD (Re-escalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
6.2.02 TRIAL BURN												
	HCL AND CL2		36.00	TESTS	0		3000 \$108,000	0 \$0	0 \$0	0 \$0	0 \$0	3000 \$108,000
	VOLATILE ORGANICS		12.00	TESTS	0		1000 \$120,000	0 \$0	0 \$0	0 \$0	0 \$0	1000 \$120,000
	SEMI-VOLATILE ORGANICS		12.00	TESTS	0		10000 \$120,000	0 \$0	0 \$0	0 \$0	0 \$0	10000 \$120,000
	ICP METALS		36.00	TESTS	0		9000 \$324,000	0 \$0	0 \$0	0 \$0	0 \$0	9000 \$324,000
	MERCURY		36.00	TESTS	0		3000 \$108,000	0 \$0	0 \$0	0 \$0	0 \$0	3000 \$108,000
	PCB		9.00	TESTS	0		500 \$45,000	0 \$0	0 \$0	0 \$0	0 \$0	500 \$45,000
	CONTINUOUS CO & O2 MONITORING		3.00	TESTS	0		10000 \$30,000	0 \$0	0 \$0	0 \$0	0 \$0	10000 \$30,000
	EPA COMPREHENSIVE TEST REPORT		1.00	LOT	2700 2,700	\$79.75 E08	215323.13 \$215,323	0 \$0	0 \$0	0 \$0	0 \$0	215323.13 \$215,323
	RCRA TRIAL BURN/DRE TEST REPORT		1.00	LOT	1350 1,350	\$79.75 E08	107661.57 \$107,662	0 \$0	0 \$0	0 \$0	0 \$0	107661.57 \$107,662
	BURN TEST SAMPLE VALIDATION		351.00	EA	0	E08	0 \$0	0 \$0	0 \$0	45 \$15,795	0 \$0	45 \$15,795
	WASTE FEED ANALYSIS SAMPLES		20.00	EA	0	E08	0 \$0	0 \$0	0 \$0	15000 \$300,000	0 \$0	15000 \$300,000
	WASTE FEED ANALYSIS SAMPLE VALIDATION		120.00	EA	0	E08	0 \$0	0 \$0	0 \$0	45 \$5,400	0 \$0	45 \$5,400
	NEPA SUPPORT		1.00	LOT	750 750	\$79.75 E08	59811.98 \$59,812	0 \$0	0 \$0	0 \$0	0 \$0	59811.98 \$59,812

DETAIL ITEM REPORT

Project Name: **OU 7-10 Staged Interim Action**
Stage III Project-Treatment-Max Treat with TD (Re-escalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
6.2.02 TRIAL BURN												
	PUBLIC MEETINGS		1.00	LOT	450	\$79.75	35887.19	0	0	0	0	35887.19
					450	E08	\$35,887	\$0	\$0	\$0	\$0	\$35,887
	REPRODUCTION AND TECH EDITOR COSTS		1.00	LOT	0		0	0	0	320000	0	320000
							\$0	\$0	\$0	\$320,000	\$0	\$320,000
Subtotal							\$2,594,225	\$0	\$100,000	\$841,195	\$0	\$3,535,420
Sales Tax							\$0	\$0	\$6,000	\$0	\$0	\$6,000
INEEUSubcontractorOverheads							\$28,037	\$0	\$0	\$0	\$0	\$28,037
Subtotal Estimate												\$3,569,457
Escalation							\$724,531	\$0	\$29,288	\$232,422	\$0	\$986,241
Contingency							\$3,267,202	\$0	\$132,070	\$1,048,085	\$0	\$4,447,357
—Total 6.2.02 TRIAL BURN					9,975		\$6,613,994	\$0	\$267,358	\$2,121,702	\$0	\$9,003,055

6.3 ORR SUPPORT

Memo: *Percentage allowances derived by the project team on the CSIX/TRU Grout Feasibility Study, produced by Washington Group International, December, 2000. These percentages were increased to account for the complexity of this option.*

	ORR SUPPORT				0		0	0	0	0	0.003	0.003
		U.C. per \$	140,235,135.00\$				\$0	\$0	\$0	\$0	\$434,729	\$434,729
Subtotal							\$0	\$0	\$0	\$0	\$434,729	\$434,729
Sales Tax							\$0	\$0	\$0	\$0	\$0	\$0
INEEUSubcontractorOverheads							\$0	\$0	\$0	\$0	\$0	\$0
Subtotal Estimate												5434,729
Escalation							\$0	\$0	\$0	\$0	\$120,116	\$5,20,836
Contingency							\$0	\$0	\$0	\$0	\$541,650	\$5,20,836
—Total 6.3 ORR SUPPORT					0		\$0	\$0	\$0	\$0	\$1,096,494	\$1,096,494

Project Name: ***OU 7-10 Staged Interim Action***
Stage III Project-Treatment-Max Treat with TD (Re-escalated)
 Project Location: ***INEEL-RWMC***
 Estimate Number: ***5974-2 (4a+3aP)***

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
6.4 FACILITY ACCEPTANCE REVIEW												
Memo: Percentage allowances derived by the project team on the CSIX/TRU Grout Feasibility Study, produced by Washington Group International, December, 2000. These percentages were increased to account for the complexity of this option.												
	FACILITY ACCEPTANCE REVIEW	U.C. per \$	140,235,135.00	\$	0		\$0	\$0	\$0	\$0	0.002	0.002
											\$294,494	\$294,494
	Subtotal						\$0	\$0	\$0	\$0	\$294,494	5294,494
	Sales Tax						\$0	\$0	\$0	\$0	\$0	\$0
	INEEL/Subcontractor Overheads	0.00%					\$0	\$0	\$0	\$0	\$0	\$0
	Subtotal Estimate											\$294,494
	Escalation						\$0	\$0	\$0	\$0	\$81,369	\$81,369
	Contingency						\$0	\$0	\$0	\$0	\$366,924	\$366,924
	— Total 6.4 FACILITY ACCEPTANCE REVIEW				0		\$0	\$0	\$0	\$0	\$742,706	\$742,786

DETAIL ITEM REPORT

Project Name: **OU 7-70 Staged Interim Action**
Stage III Project-Treatment- Max Treat with TD (Re-escalated)
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 (4a+3aP)**

Client: **S. L. Austad**
 Prepared By: **R. D. Adams / S. N. Wasley**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractu</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Eaument</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
6.6 OPERATOR TRAINING												
Memo: Percentage allowances derived by the project team on the CSIX/TRUE Grout Feasibility Study, produced by Washington Group International, December, 2000. These percentages were increased to account for the complexity of this option.												
	OPERATOR TRAINING	U.C. per \$										
		140,235,135.00 \$			0		\$0	\$0	\$0	\$0	0.028	0.028
											\$3,926,584	\$3,926,584
<hr/>												
	Subtotal						\$0	\$0	\$0	\$0	\$3,926,584	\$3,926,584
	Sales Tax						\$0	\$0	\$0	\$0	\$0	\$0
	INEEUSubcontractorOverheads	0.00%					\$0	\$0	\$0	\$0	\$0	\$0
<hr/>												
	Subtotal Estimate											\$3,926,584
	Escalation						\$0	\$0	\$0	\$0	\$1,084,915	\$1,084,915
	Contingency						\$0	\$0	\$0	\$0	\$4,892,319	\$4,892,319
<hr/>												
—Total 6.6 OPERATOR TRAINING					0		\$0	\$0	\$0	\$0	\$9,903,818	\$9,903,818

9.7 OPERATING PROCEDURES

Memo: Percentage allowances derived by the project team on the **CSIX/TRUE** Grout Feasibility Study, produced by Washington Group International, December, 2000. These percentages were increased to account for the complexity of this option.

	OPERATING PROEDURES	U.C. per \$										
		140,235,135.00 \$			0		\$0	\$0	\$0	\$0	0.006	0.006
											\$863,848	\$863,848
<hr/>												
	Subtotal						\$0	\$0	\$0	\$0	\$863,848	\$863,848
	Sales Tax						\$0	\$0	\$0	\$0	\$0	\$0
	INEEUSubcontractorOverheads	0.00%					\$0	\$0	\$0	\$0	\$0	\$0
<hr/>												
	Subtotal Estimate											\$863,848
	Escalation						\$0	\$0	\$0	\$0	\$238,681	\$238,681
	Continaency						\$0	\$0	\$0	\$0	\$1,076,310	\$1,076,310
<hr/>												
—Total 6.7 OPERATING PROCEDURES					0		\$0	\$0	\$0	\$0	\$2,178,840	\$2,178,840

Project Name: *OU 7-70 Staged InterIm Action*
Stage III Project-Treatment-Max Treat with TD (Re-escalated)
 Project Location: *INEL-RWMC*
 Estimate Number: *5974-2 (4a+3aP)*

Code	Description	Contractor	Qty	UOM	Hrs	Resource	Labor	Equipment	Material	Subcontractor	Other	TOTAL
<u>7.0 PROJECT MANAGEMENT</u>												
Memo: Percentage of construction and procurement costs based on detailed input from the project team for the LCB effort, OU 7-10 PIT-9 STAGE III - LCB, estimate # 5974-1. Also considered were percentage allowances derived by the project team on the CSIX/TRUE Grout Feasibility Study, produced by Washington Group International, December, 2000. Where large discrepancies occurred, an average of the two percentages was applied here.												
	PROJECT MANAGEMENT SUPPORT	U.C. per \$	140,235,135.00	\$	0		\$0	\$0	\$0	\$0	\$0,000,000	\$12,621,162
Subtotal							\$0	\$0	\$0	\$0	\$12,621,162	\$12,621,162
Sales Tax							\$0	\$0	\$0	\$0	\$0	\$0
INEEL/Subcontractor Overheads							\$0	\$0	\$0	\$0	\$0	\$0
Subtotal Estimate												\$12,621,162
Escalation							\$0	\$0	\$0	\$0	\$2,381,613	\$2,381,613
Contingency							\$0	\$0	\$0	\$0	\$11,008,247	\$11,008,247
Total 7.0 PROJECT MANAGEMENT					0		\$0	\$0	\$0	\$0	\$26,011,022	\$26,011,022

Subtotal	MAX TREATMENT WITH TDF-Re-escalated	\$22,587,009	\$2,137,951	\$89,418,648	\$32,291,773	\$** ,*** ,***	\$** *** ,***
Sales Tax		\$0	\$0	\$5,365,119	\$0	\$0	\$5,365,119
INEEUSubcontractor Overheads		\$3,707,591	\$681,500	\$3,643,155	\$2,604,819	\$0	\$10,637,065
Subtotal Estimate							\$** *** ***
Escalation		\$5,191,501	\$532,030	\$14,583,277	\$4,996,048	\$17,406,845	\$42,709,701
Contingency		\$23,482,117	\$2,407,660	\$73,222,125	\$32,805,514	\$** ,*** ,***	\$** ,*** ,***
Total MAX TREATMENT WITH TDF-Re-escalated	293,030	\$54,968,218	\$5,759,141	\$186,232,324	\$72,698,154	\$235,800,964	\$555,458,801